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AUGUST, 1884.

DR. STURTEVANT, of the New York Experiment Station, has been testing methods to obtain early crops of Peas. The methods adopted relate to the treatment of the seed, and the selection of the seed.

"On March 21st, a few American Wonder Peas were placed to sprout in a box of moist sand in the greenhouse. Germination soon occurred, and it was soon evident that we had commenced operations too early for transferring the seed to the soil, hence when the radicle was about a inch long, the box containing the seed was removed to the cellar in order to check further development. On April 14th, a row was planted in the garden of these Peas, selecting the most advanced, and at the same time a second row was planted with unsprouted seed for comparison, the seed of each row taken from the same seed package. The sprouted seed vegetated April 25th, the unsprouted April 28th. The first bloom appeared on the first row on May 26th, and on the second row May 31. On June 10th twenty-five pods were of edible size on the plants from the sprouted Peas, and it was not until June 18th that an equal number were of edible size on the plants from the unsprouted seed. This process of planting, hence, appears to have given us a gain of eight days in the maturing of the crop, and when it is considered how

little trouble this sprouting necessitates, it seems proper to recommend this system to the amateur, and to call the attention of the market grower to the possibility that the extra labor required may be offset by the resulting earliness."

In the tests for the earliest variety no conclusion has been reached after three years' trial with nine kinds of early Peas. Earliest of all, Kentish Invicta, Perry's Extra Early, Carter's First Crop, Daniel O'Rourke, Early Alpha, American Wonder, Blue Peter, Carter's Premium Gem, are so nearly alike in time of production that it is impossible to decide one or more of them to be superior to the others in this respect. Earliness is affected by the date of planting, or, in other words, the temperature or climate. A variety that in 1882 "was fit for the table in fifty-four days from the early planting, in 1883 required sixty-one days for the early planted and forty-nine days for the later planted." The same variety, this year, required fifty-four days for the early planted.

Whether there will be any profit to the market grower by sprouting the Peas, as described, to hasten their maturity can be determined only after some trials; probably much will depend on localities, and the competition in the market of southern Peas will affect the case. But the private grower who delights to sup-

ply his table with the choicest vegetables will be apt to avail himself of this method of treatment.

It is opportune in this connection to recall to the notice of our readers a Pea Protector, described in volume 5, page 55, of this MAGAZINE, the "Protector," which is there described and illustrated, consisting of a light glass-covered frame. It is made in lengths of twelve feet, is easily handled, and can be safely and compactly stowed away. The amateur could, no doubt, use it to advantage in hastening his crop.

A few years since an extract from a foreign journal was published in these pages, detailing a practice with Peas by which it was stated the produce was more than doubled, and this would be something quite remarkable. The following is the extract referred to: "As soon as the first few blossoms were open the plants were topped, which caused lateral growths to issue from bottom to top of each stem, and these are now blooming and fruiting most abundantly, in fact, the crop is much larger than from the first main stems." Perhaps Dr. STURTEVANT may, in future, favor us with some carefully conducted experiments to prove the value of this practice.

The great Exposition to be held in New Orleans, next winter, will afford one of the grandest opportunities ever offered for a display of the horticultural products of this country. Mr. PARKER EARLE, of Cobden, Ill., who is the Superintendent of the Horticultural Department, made some statements before the Association of Nurserymen, Florists and Seedsmen, at its meeting in Chicago, last month, indicating the magnificent scale upon which preparations are now being made to attract and accommodate the horticultural interests of this country. Nearly one thousand premiums are offered for fruits, plants and trees, embracing the whole field of horticulture. More than \$100,000 will be expended on the Department of Horticulture. A building is now about completed which provides room for twenty-five thousand dishes of fruit, and room is reserved to the extent of forty thousand square feet for the exhibition of plants and floral goods. A hundred acres of ground is ready to receive the exhibits of trees, shrubs and all objects that can be shown

in the open air. Premiums are offered for fruits, plants and flowers to the amount of more than twenty thousand dollars in cash, besides gold and silver medals. This great fair, which will last several months, and is to represent every department of human industry, will have large contributions from Mexico, the different countries of Central and South America, and Europe, Asia, Africa, and from Australia.

The most attractive time for horticulturists to visit the exhibition will be about the middle of January, when the Mississippi Valley Horticultural Society holds its annual meeting there. The enterprise of Minnesota is shown in the fact that five thousand dollars has been placed at the disposal of its State Horticultural Society to facilitate the collection of exhibits from that state at the New Orleans exposition. Horticulturists, individually or in societies, in all parts of the country, are desired to contribute to this great show, and special arrangements have been made for railroad transportation.

The large crop of Cherries, this year, came at a time when the fruit canning establishments were overburdened with the stock of last year's fruit. Cherries have brought in the market only a quarter of last year's prices, and this affords, apparently, a poor prospect to those who have within a few years planted Cherry trees largely to supply the prospective demands of canning factories.

The raisers of small fruits also see in this state of things forebodings of evil to their crops. Really, we think there is no reason, at present, to be alarmed.

The past year has been one of general business depression, caused first and principally by the poor farm crops in all parts of the country; manufacturers, mechanics and traders have been obliged to make and sell less for the reason that the agricultural community, which constitutes by far the larger part of the population, has not been able to pay for their goods. The canned fruit interest has suffered with all others. But with a revival of business the consumption of fruit will be as great as ever, and those who may produce a supply of good fruit will find in a series of years a liberal remuneration for their labors.

The present state of things, however, apprises us that there is a limit to the

profitable extension of small fruit culture and the preparation of canned and dried fruits, and possibly we may now be near that limit. Those now engaged in this culture will know how best to adjust themselves to the market demands, whatever they may be. What is always to be deprecated is a rush into any branch of cultivation that for a brief period promises unusual profits. Great numbers of persons thus engage in business of which they have no knowledge, and to which they are not adapted, with a result of failure easily foreseen by those who calmly and clearly trace causes to their logical sequences.

Strawberries, the past season, have brought fair prices in all the great markets; it is at this time, July 8th, too early to make any statements in regard to Raspberries and Currants, as they are just now coming forward. In nearly every part of the country the average quantity of fruit consumed by each individual is increasing from year to year, a fact that must be given its full value in every proper estimate of a prospective demand for fruit. A year of low prices, should we happen to have one, will discourage no one who understands his business, and it may act as a healthy check to those who may be making ventures in untried fields.

Local storms of great severity continue to visit different parts of the country, doing much damage and often killing persons. The weather continues to fluctuate between great extremes of heat and cold. As the heat subsides the red lights at sunset and sunrise, which have now been witnessed at times for nearly a year, appear with greatest brilliancy at the time of lowest temperature. If the weather should continue of this character there is some reason to apprehend early frosts in north latitudes, and it will be well to accept these indications as admonitions to promptness in securing crops as soon as mature, and to take all practical precautions to guard against loss from early fall frosts. At any rate, there is nothing to lose by keeping well ahead with all farm, garden and orchard work, and being ready for an emergency, if it should appear. The promise now, perhaps with local exceptions, is an abundant harvest throughout all our wide borders.

VARIEGATED WEIGELA.

All the Weigelas are favorite shrubs. The dwarf growing variety, shown about two-thirds natural size in the present illustration, has a peculiar attraction in its white-margined leaves. It blooms abundantly early in summer, having a



VARIEGATED-LEAVED DWARF WEIGELA.

delicate blush or nearly white blossom. When planted in groups with dark-leaved plants, such as Purple-leaved Filbert and Purple-leaved Berberry, it makes a fine contrast. Like the other varieties of Weigela, it is easily suited with soil and location, and needs but little pruning more than to keep dead branches cut out. It is easily increased by cuttings and layers. The dwarf character of this plant, and it seldom exceeds three feet, with its other attractive qualities, makes

it particularly desirable for small places, as well as for occupying conspicuous places in the front of borders and groups.

AUGUST HINTS.

At this season of the year the garden should present its best and neatest appearance. The lawn should be in its best trim, the trees in full growth and leafage, exhibiting their greatest beauty; the flower garden showing the greatest variety and amount of bloom; the vegetables bountifully supplying the kitchen; and the orchard with its ripe and maturing fruits gladdening both the eye and the palate. The paths should be neat, and the hedges trimmed, and a weed a rarity. Tall-growing, but weak-stemmed, flowering plants, like the Dahlia and the Gladiolus, should be supported by neat stakes. Caterpillars' and insects' eggs should be hunted out and destroyed. The pinching in of Chrysanthemums should be discontinued, and the flower buds now be allowed to form. It is a good time to strike cuttings of Geraniums, Begonias, Heliotropes and many other soft-wooded plants, as well as the flowering shrubs. A shaded cold-frame for this purpose will prove a valuable aid. During the latter part of the month, and a few weeks following, seeds of quite a variety of herbaceous perennials may be sown, such as Pansy, Perennial Poppy, Sweet William, Hollyhock, Chinese Pink, Digitalis, Canterbury Bells, Lychnis, Antirrhinum, Scabiosa, and others. Callas for earliest blooming can be repotted the last of this month; so also Cyclamen and Oxalis bulbs. It is the most favorable season for repotting many hard-wooded greenhouse plants. There is no better time than this for making preparation for new lawns, under-draining the ground, if necessary, and plowing or spading, and pulverizing it, and sowing the seed at the close of the month or soon after. By doing this work early a fair stand of grass can be had in the fall that will be ready to start strong early in the spring. Turnips can yet be got in. The governing principle of those having fruit to market should be honesty. There is nothing to be gained by packing poor fruit in the middle of the case; there is certain to be a recoil in this practice that will strike the dishonest fruit-grower.

THE TRUMPET FLOWER.

The value of *Tecoma radicans*, commonly called Bignonia, as a hardy climber, entitles it to the prominent notice we make of it this month by a colored plate. Although found in its wild state only from Pennsylvania to Illinois and southward, yet it bears the climate perfectly up to the Lake Superior region, and is more or less cultivated in all parts of the country. In its natural condition the stem grows from twenty to eighty feet in length. This plant climbs by means of rooting tendrils, and thus fastens itself and ascends tall trees, and climbs over the branches of trees and shrubs and along rocky cliffs. For several weeks during summer it produces its large,



TRUMPET VINE ON A SUMMER HOUSE.

showy blossoms, and is then an object of striking beauty. It is a fine climber for a porch, wall or pillar, its pinnate leaves being quite graceful. The foliage is luxuriant, giving abundant shade. This plant can also be employed as a single lawn specimen by keeping it pinched in at a height of six or eight feet; in this form it throws out new shoots every season from the head, which droop down about the stem and bear flowers plentifully over the whole surface. For covering a screen, arbor or summer house it is excellent, and it is one of those reliable plants that can always be depended upon to make a good appearance without much attention. The plant can be increased by layers, or more rapidly by seed, which is produced abundantly.



THE STRAWBERRY—PRIZE ESSAY.

The cultivation of the Strawberry for market.

To cultivate the Strawberry successfully for market it is first necessary, as in a logical argument, to establish correct premises, that is, to select a suitable location and soil, and to thoroughly fertilize and prepare the ground. In the selection of location, having first, of course, been satisfied that there is a remunerative market within reach, and that pickers can be readily obtained, get land, if you can, having both a northerly and southerly exposure, and soil suitable for the growth of the Strawberry. The best soil for the purpose is a deep, mellow loam which has sand enough in its composition to work freely; the next best is clay, if not too stiff, and with proper drainage facilities; the poorest is sandy land with a gravelly subsoil.

In obtaining a location with slopes, as recommended, try to have the soil of the portion sloping toward the south as warm and quick as possible, and while nature generally does much toward making vegetation on such slopes grow rapidly, assistance can be given by proper drainage, the use of such fertilizers as ashes and guano, and deep, thorough culture. The object of having land with different exposures and difference in quickness of soil, is to prolong the Strawberry season. Upon the southern slope, early varieties can be grown and ripened from one week to ten days before the ordinary crop in the vicinity will be ready for market. By reversing the process, and using the northern slope for late varieties, the plants will bear fruit after the main crop is gone, and the owner of a plantation so situated will avoid a glutted market and realize better prices than less fortunate or less skillful competitors.

Land to be planted to Strawberries should have proper drainage, so that water does not stand upon or near the surface, yet the slope should not be so great that the land will wash. If there is not sufficient natural drainage, and in all cases, if possible, drain thoroughly with tile. The land should have been well cultivated with hoed crops for the two years next preceding Strawberry planting, in order to rid the soil of the white grub and to assist in killing out clover, blue grass and noxious weeds. Each year of such prior cultivation work into the soil all the stable manure that can be obtained; if that is not to be had, apply any fertilizer within reach, giving preference to those rich in potash, and put on all you can buy, beg or carry away.

In the fall after the second year's crop fertilize again, plow the ground deeply, if not underdrained, subsoil it and leave rough through the winter. In the spring following, as early as the ground is suitable to work, plow it again in a direction opposite to that traversed in the fall, using the subsoil plow in addition. After plowing, harrow thoroughly, making the soil fine.

The proper time to plant is as early in the spring as possible, especially if the plants are purchased. Plants from a distance will carry better and grow more surely in the cool, moist weather of the early spring time, when they are nearly dormant, than after a rank growth of vegetation has been made to heat and decay on the journey later in the season. I think it a good plan to order plants to arrive as soon as the frost is enough out of the ground to heel them in when received; then, upon arrival, to dig a shallow trench, laying the plants in singly, close, yet not crowding them, covering the roots with earth firmed carefully

upon them. By so doing, the plants are on hand when the ground is ready for them, they are fresh and keep so until set, and favorable weather for planting can be selected. If you raise your own plants you can set them any favorable day, if you are careful, yet, as a rule, the earlier plants are set in the spring the better are the results that follow.

The ground having been prepared, stretch lines at proper distances for the rows, have the plants ready, with roots straightened, and all dead leaves and old runners removed; keep the stock of plants for each day in tubs, with water covering the roots, and make each person while setting keep his or her plants in a pail with a like root protection, not taking out a plant until ready to place it in the ground. Arm the planters each with a garden scoop or trowel; station them one at a row, and keep them always on the same side of the line until the rows are finished.

Set the plants thus: With a single blow drive the scoop into the ground to the depth of the blade and with the back of the blade toward the line; draw it forward enough to admit the plant roots, thus leaving a straight side to the cavity next the line. Spread the roots of each plant in a fan shape, and place them next to the straight side of the hole, then pack the earth firmly to the plant, covering all roots, yet leaving the crown exposed, and firm the plant in carefully. The important things to be observed are, keeping the plant roots wet while out of the ground, spreading them while setting, covering just right and carefully firming the earth around the plant. By making a direct stroke with the scoop and a straight side to the cavity for the plant the earth upon that side is left moist, and the roots being brought in contact with moisture grow readily even in a dry time.

I prefer using lines in setting, to any other method of marking the location of the rows; the plants set by line are left upon a level with the surface, and not in a hollow to be covered with mud by the next rain, or upon a ridge to wither with succeeding drouth. Take pains in setting the plants; upon care in this, much of future success depends. Do not be anxious to hasten this work, remember that one plant that lives is better than a thousand that perish.

Growers of the Strawberry have several methods of culture from which to chose, and these methods may be classified and described, as follows:

First, Hill Culture. By this system plants are set eighteen inches apart in the row, in rows three feet distant, and all runners are kept off as they appear, the plants forming crowns instead of young plants. Very large berries are grown in this way, and they are easily picked, but it is an uncertain method in sections where the winters are excessively cold and the snowfall light, as the plants suffer and frequently winter kill. Some varieties, as Jucunda, Sharpless and Bidwell seem particularly adapted to this method of culture on account of habits of growth. A modification of this method makes what is called the narrow row system, to grow thus: Set plants as in hill-culture, and instead of removing all runners allow one to remain and form a single plant in the row on each side of the parent plant; then remove all other runners from the new, and the old plants, as fast as they appear.

Second, the Matted Row. This method is most used by growers of Strawberries for market; by it plants are set from one to two feet apart in the row, and the rows are located from three and one-half to four feet apart, distances varying as the variety planted is feeble or vigorous in growth and in productiveness of plants. After setting, keep off the runners until the plants are well established, then let all grow. Keep the plants clean with hoe and cultivator until the young plants begin to take root, then suspend hoeing, but keep on cultivating as long as the season will permit, narrowing the cultivator as the plants spread, until at the end of the season the paths between the rows are about two feet in width. In cultivating, always go the same way of the rows, that is, if you run next the row at the right in the beginning, keep next the row on that side at each succeeding cultivation. Have all weeds that appear in the rows after the runner-plants begin to take root pulled out by hand, and let the persons removing the weeds at the same time straighten the runners and distribute the young plants forming, so that they will occupy the vacant spots, fixing them there with lumps of earth. This hand-weeding can be done by boys,

very quickly and cheaply, and is of great value to the plantation. The matted-row system may be modified to suit the wishes of the grower, so that the width of the rows or number of plants will be increased or diminished.

A third system, sometimes adopted in the west, may be called the Matted Hill method. By this the ground is marked both ways, as for Corn, three and one-half feet between the marks. Plants are set at the intersections, which are cultivated with a sulky corn-plow with guards on, until the runners are too numerous, then with a one-horse cultivator to the end of season; all runners being allowed to grow and root. If the soil is not very weedy, fair crops of berries may be grown in this way without any hoeing.

In raising Strawberries by any method have the rows twenty to twenty-five rods long, use horse-power as much as possible, keep clean, killing every weed as soon as it sprouts; keep the soil mellow, cultivating whenever the weather and the condition of the ground will permit. It has been said that "tillage is manure," and your berries will do better without manure than without tillage. By this method of cultivating, the surface will be kept level, and no ridges or furrows will be left between the rows.

In the fall, when freezing weather sets in, cover the plants two or three inches deep with wild hay, clean straw, sorghum bagasse, or any other coarse material that is free from weed seed, to prevent the plants from heaving.

In the spring, after the ground stops freezing, remove most of the covering into the paths between the rows, leaving enough around the plants to keep the berries clean, yet not so much as to retard growth, and let the covering placed in the paths remain to mulch the plants.

If there is prospect of a severe frost in blossoming time, get out all hands and work back a covering from the mulch in the paths, over the plants to shield them from the threatened danger. Unless early berries are desired, it is better to let the mulch remain upon the plants as long as possible in the spring, thus retarding blossoming and lessening danger from frost.

The great requisite of the Strawberry from the time it blooms until the berry matures is water; the mulch between

the rows helps to keep the roots moist, but when the sun is like fire and the heavens as brass for about a week, the crop dwindles unless water is supplied. If you have no means of irrigation, try this plan: make a tank, water tight, the size of a wagon box, and a little deeper, sides and bottom of one and one-half inch boards. At the rear have a sprinkler attached, projecting one foot at each side beyond the wagon wheels; sprinkler of galvanized iron, four inches in diameter. Having beforehand arranged an elevated tank at the windmill, or a pump and platform in the pond, or some other water supply, off with the wagon box and on with the sprinkler, harness up, load with water, and from five in the afternoon until dark, and from daylight until seven in the morning wet down the plants, driving astride the rows and watering three rows at a time. The expense of this method of watering is small, and there is no expenditure that will yield a more profitable return.

When the berry season arrives, keep close watch of the pickers; have them pick clean, don't let them pull the berries off, make them pinch off the stems. Do not allow unripe fruit, leaves or culls to go into the baskets, and do not allow the pickers to kneel on the plants, or skip any row, and discharge those who are careless or disorderly. Have a supply of tickets printed, most for one quart, next for four or six quarts, as the size of the pickers' trays may be; then, for such a number of quarts as will come to one dollar, or some other convenient multiple of the price per quart paid for picking, and give tickets for every quart of fruit as it is brought in.

Use clean, attractive packages; if for long shipment splint baskets are preferable, for a home market the veneer boxes answer very well. Always send good fruit to market, a little care in picking and handling will enhance values.

After the picking season is over, mow the plantation with a scythe, top-dress it liberally with well-rotted manure; with a twelve or fourteen-inch stirring plow having a rolling coulter, throw two furrows together between the rows of plants, leaving the rows six or eight inches wide, then harrow thoroughly both ways, leave the plants until after a rain, and then hoe them out clean, and cultivate between

the rows the rest of the season, letting all runners grow.

When the ground freezes, top-dress the rows with coarse manure, and the second crop will be nearly as good as the first.

After the second crop is picked, plow up the whole plantation and cultivate for two years before growing Strawberries on that plat of ground again.

The selection of varieties depends upon the character of the market; if a large, high-flavored berry can be sold for a big price, grow *Jucunda*, *Sharpless*, *Jersey Queen*, and that class; if quantity is desired, plant *Crescent*, *James Vick*, *Miner* and *Manchester*; for a distant market you want firm berries, as the *James Vick*, *Glendale* and *Wilson*.

Pistillate varieties, like *Crescent* and *Manchester*, must be fertilized by planting with them staminate kinds that bloom at the same time, and I prefer the proportion of two rows of staminates to four rows of pistillates, to any other tried by me. Buy plants of reliable nurserymen, who will furnish what you order, of good quality and properly packed, and be willing to pay a fair price for what you buy.

And now, reader, having completed our journey together over the Strawberry fields, I must say, farewell, and may that "Providence that tempers the wind to the shorn lamb," favor you with gentle breezes and timely showers, that you may have Strawberries in abundance and wealth "galore;" such is my wish, for whatever counsel we take and experience we relate, yet much dependeth upon the weather.—JOHN F. DAYTON, *Wauken, Iowa*.

MAKING A FERNERY.

It very often happens that the lover of flowers and plants has no suitable window to grow them in. But if she have nothing better than a north window to her room, she need not be without the pleasure afforded by a daily sight of "green things growing," for she may have a fernery. Some persons have the idea that it is very difficult to make a fernery, or the case in which Ferns and other moisture and shade-loving plants can be successfully grown, and that it requires a "knack" for that particular branch of plant-culture to keep a fernery in good condition after plants have been established in it. This is a mistake, for

nothing is easier after you know how, and this "know how" is not hard to acquire.

A fern-case can be made cheaply if one has the "knack" of handling tools, but if this "knack" is not possessed, I should not advise the attempt at home, for quite likely the result will be more expensive and far less satisfactory than it would be if given to a carpenter who knows how to go to work to do what is to be done. In most towns it is cheaper to buy a case ready for filling than it is to have one made, for those for sale by florists are just what you want, and the article you get made by a carpenter, no matter how good a workman he may be, may be "just the thing," and possibly not. The cost of a small fernery, but one large enough to afford a vast amount of pleasure, is but small.

But do not buy one already filled with plants if you are any where near the woods, for obtaining plants for yourself, and arranging them to suit your own taste is one of the most delightful of all undertakings.

A fern-case should have a zinc bottom from three to six inches deep, to contain soil, and the glass must fit snugly. One with a roof-like top is preferable to those having a flat top, for the plants are given more space to reach up without coming in contact with the glass.

The best soil for a fernery is the fibrous earth which you can obtain plentifully in any forest by scraping away the covering of last year's leaves. It is mostly leaf-mold, with some fine loam in it, and it is so full of fine roots that it is impossible to make it into a compact, inelastic mass by pressure. It has exactly the porous quality necessary for the basis of success in the fernery you are about to establish. Fill the zinc pan with this soil, heaping it somewhat in the center. Then you are ready for the plants.

I advise you to select a cloudy day for your trip. Take a large and shallow basket to bring back your Ferns and Mosses in. Arm yourself with a trowel, and start for the woods. You will find large and luxuriant specimens of Ferns, and you will be inclined to select such for your fernery, but don't do it. Get small plants. They will adapt themselves to the new conditions more readily than larger plants, and will soon become fine

specimens. You cannot transplant a large Fern successfully; that I have found out by experience. The best kind for the fernery is the Maidenhair. This Fern grows plentifully in shady, moist places along the banks of streams and among old rocks, and is easily obtained. With your trowel you can get fine plants without mutilating the roots in the least. Put them in your basket carefully, and if water is near by sprinkle them well as fast as dug. There are other varieties of Ferns always growing with the Maidenhair, and you will choose such as suit your fancy best. The Mosses growing on old logs and rocks are just what you want to cover the soil after you have planted your Fern roots. If you can find sods in which the *Mitchella repens* or Partridge Berry grows, by all means take some of them, for this most charming little plant will flourish finely in a fernery, blooming and bearing its scarlet berries as freely as in its native woods. There are many plants to be obtained in the woods which can be used in a fernery, but do not select enough to crowd it. Most persons do that, and the result is never satisfactory. Give the plants room to spread and develop in and they will be much finer in every way than when you put too many plants in the case.

When you come home from your trip to the woods, put your Fern roots carefully in the soil, being careful not to bruise them in handling. Place the large ones in the center. Do not plant any Ferns near the edge, but reserve that place for the *Mitchella* and other low-growing plants. When you have planted your roots cover with Moss, and then give a thorough watering, after which put on the cover of your case and let your fernery take care of itself. A north window is a very desirable one for it, for sunlight is not necessary in growing such plants as will flourish under the conditions which govern a fern-case. It will not need watering often; once a month will do. Open the top once in a while, to give fresh air, and be sure to keep all decaying leaves removed. This is really all the care a fernery requires.

Ferns are the most beautiful of all plants for use in such cases, but the Rex varieties of Begonias flourish well in them, and are very effective. *B. Weltoniensis* is very desirable, for its pale pink

flowers brighten up the prevailing green charmingly. *Lycopodium* is excellent for covering the soil.

Such a case of growing plants is a most admirable substitute for flowers, and it will be the source of great pleasure to any one who cares to watch the development of plants under peculiar conditions. A room can have no finer ornament.—R. F. D.

DRIFTING AND DREAMING.

I have been drifting and dreaming, to-day;
I cast my boat loose in a Willow-fringed bay,
Where the reeds and the rushes stood up in the shade,
Like soldiers in green, who were out on parade.
A blue Iris flashed, like a flag in the ranks,
And the many wild Roses that grew on the banks,
Stood for beauty assembled to watch the brave sight
Of the tall grenadiers, with no battle to fight.

My little boat floated out into the stream,
As our thoughts drift away on the tide of a dream.
I saw in a tree-top an Oriole's nest,
Swung this way and that by a wind from the west,
And envied the mother-bird, brooding within
Her dwelling, away from the world's work and sin.
Does she dream, as she broods, of the shell-folded
wings,
Till her heart with the rapture of motherhood sings?

I saw on a bank, where the Mosses had spread
A carpet for elves of the summer to tread,
The prints of a deer's feet, and heard, far and faint,
The sound of a fawn, making lonesome complaint,
And I wondered if man had invaded the spot,
Leaving sorrow behind him, and hoped he had not,
For my heart was so free from all trouble and care
I wanted all creatures my gladness to share.

A sky lark sent up in the uttermost blue
An arrow of song, and I fancied it flew
To Heaven's gate, with a message too pure and too
sweet
For aught but the voice of a bird to repeat—
A message of gratitude, wordless as prayer
When our hearts overflow with the happiness there,
To the Great Heart that knows when the brown
sparrows fall,
The tribute of earth to the Lord over all.

I saw, here and there, as I went down the river,
The sun through the trees in the blue waters quiver,
And my little boat passed, like the lives of all men,
Through sunshine and shadow, again and again.
So we drift down time's stream, as I drifted away,
Through the light and the shade of our life's little
day;
Through the storm and the calm, down the current
we glide,
Till we reach the great sea and go out with the tide.

Drifting and dreaming, forgetful of strife,
Of the work and the wearisome worry of life;
Resting to-day for the toil of to-morrow,
Gaining a respite from care and from sorrow.
In the morning I take up my labor again,
But a breeze from the river will blow round my pen;
With new, fresher thoughts shall the pages be
teeming,
Because of to-day, with its drifting and dreaming.

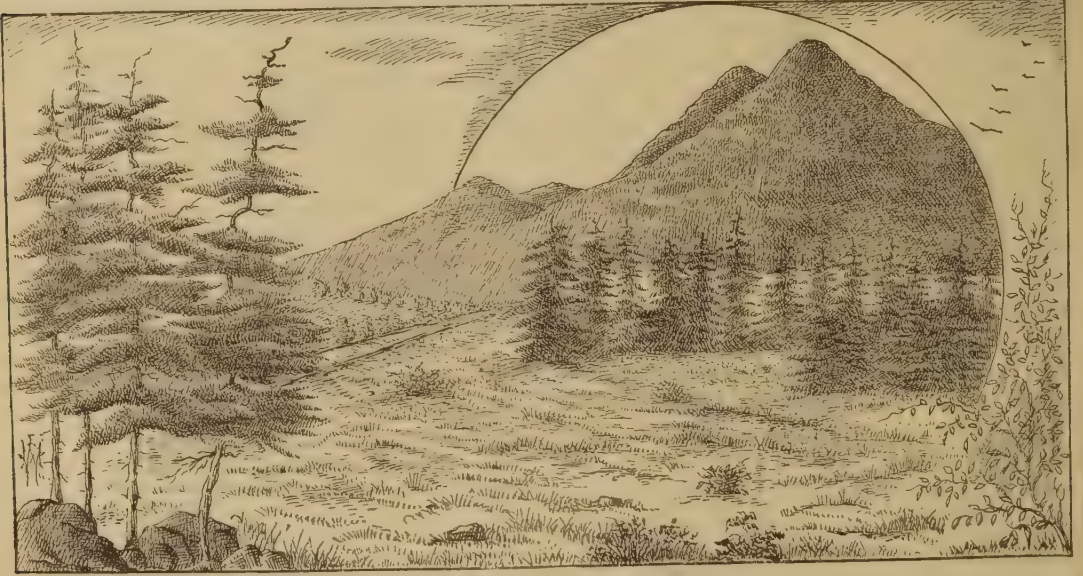
—EBEN E. REXFORD.

GLIMPSE OF THE ADIRONDACKS.

The vast wilderness of the Adirondacks seem truly a store house of wondrous beauty, as range after range of mountains rise one above the other as far as sight can reach, with now and then some rugged peak towering high beyond the rest, till its head seems almost to reach the sky, and the misty, white clouds partially veil its face. Here and there a stream, as it winds its way down some rocky cliff, seems like a thread of silver shimmering in the summer sunlight, and

the arrival of the coaches with the daily mail. This is one of the important events of the day.

The ascent to Lake St. Regis is so gradual as to be scarcely perceptible, though the elevation, when reached, is several thousand feet above the level of the sea. Lake and Mt. St. Regis are very beautiful, and many spots of peculiar loveliness are within a short distance of them. The lake is quite a large sheet of water dotted here and there with foliaged islands, and Mt. St. Regis raises



MOUNT ST. REGIS.

far away in the distance the tranquil waters of a lake sparkle and glisten with dazzling brilliancy.

The route to the wilderness may include, if one pleases, a sail on the waters of the lovely Lakes George and Champlain, each with its own peculiar beauty, varying every hour as the sunshine and clouds chase each other over their faces, and cast light or shade upon the water or mountain sides. At the terminus of the steamer trip through these lakes, Plattsburg is reached, where a rest over night will refresh one for the ride in the cars the following morning, and one of thirty-eight miles by coach, if St. Regis is the point of destination.

From Au Sable, with its far-famed chasm, there are scattered at intervals along the stage route, groups of houses called villages. There, of course, is the village store where the Post Office is stationed, and about this may be seen congregated the men of the place awaiting

its head far above the glistening lake. From there a drive or walk of a short distance brings one to another body of water called Jones' Pond, a small but pretty lake, with Lily-pads and snowy Lilies floating thickly on its surface.

Then the road leads through the great dark Pines, whose resinous fragrance fills the air with sweetness, threading its way still further through the graceful feathery Tamaracks to Rainbow Lake so named for the shape of its shores, but is doubly worthy of the title because of the most wonderfully beautiful rainbows that are formed during the thunder showers, which are frequent at the place through the summer months. One was seen, a perfect arch in the sky, and reflected so faithfully in the lake that an unbroken circle was formed.

Again, toward sunset, one evening a heavy thunder shower arose, and the rain fell in torrents for a few moments. Just as the sun was about to set, the



THROUGH THE PINES.

clouds were riven, and there was a scene of gorgeous beauty, for the sun rays touching the western clouds lighted them up with gold and crimson, and reaching away to the curtain of sombre clouds in the east, painted upon it two of the most

on the banks ; therefore, rowing is out of the question and the paddle is used instead of oars. Not a sound is heard, except now and then the whistle of a bird, or the splash of water caused by the breaking of the trout. An unaccountable feeling of awe comes over one while passing through this scene, which is, indeed, a strange freak of nature.

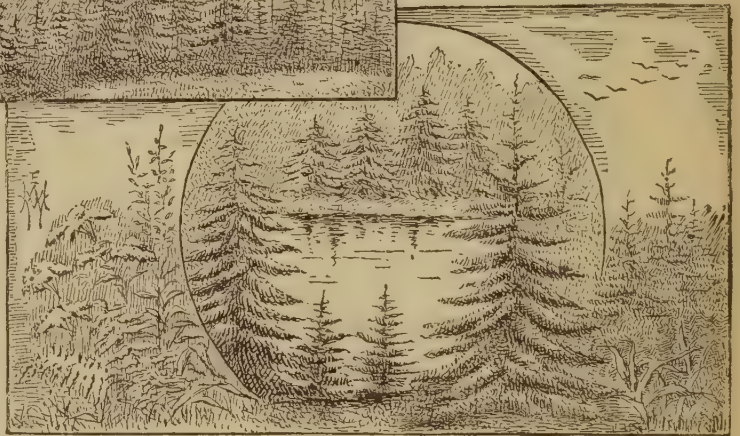
The tour of the lakes is frequently



WHITE FACE MOUNTAIN.

brilliant and perfect bows. Pictured within this double arch was the green foliaged side of a mountain, and this formed the background at either end of the bow, which looked as if really resting upon the earth. Truly, it seemed as if the fabled pot of gold might be within easy reach of those who coveted its possession, and that by taking a few steps they could stretch out their hands to grasp the treasure.

A winding stream, called the Inlet, and which is the inlet of Rainbow Lake, is a place of weird and ghostly beauty, for it seems a strange and fantastic grouping together of the living and the dead. Tall, stately Pines rise from the water, and spread out their dark green arms in all directions, and thickly grouped with these are the Tamaracks and other varieties of trees without a trace of life in them, yet they are so covered with Lichens and draped with long festoons of gray Moss that their lifelessness is scarcely thought of, and the contrast of these with the sombre foliage of the Pines presents a scene of peculiar beauty. The stream winds in such a circuitous route, and is so narrow that there is scarcely room for a small boat to pass through without pushing aside the branches of the bushes growing



RAINBOW LAKE.

made by means of boats under the care of experienced guides, and where the lakes do not connect, a carry is made. The boats are taken from the water and carried on the backs of the guides, if the distance is short to the neighboring stream or lake through which it is necessary to pass ; or, should it be too far for the boat to be taken in this way, it is transported by means of a horse and wagon.

The invigorating air and the beautiful scenery through which one passes, combine to make the trip a very delightful one to the tourist and pleasure seeker.

The novelty of camp life, and the couches of Pine boughs are more delightful to rest upon than can be imagined after a day's sport in the way of gunning or fishing, or a search for berries or wild flowers, is all so odd that there is a peculiar charm to it. The lovers of nature will feel fully repaid for visiting the Wilderness when viewing the numberless scenes of beauty in which this picturesque region abounds.—M. E. WHITTEMORE.

EXOTIC GRAPES IN CALIFORNIA.

Cannot cultivators of choice European table Grapes under glass receive useful hints from observations upon the growth of some varieties under various conditions in open air in California?

The amount of moisture needed, exposure to sunshine and air, with varying heat, the time and manner of application under varying conditions, seem to be matters always under discussion, and evidently are deserving renewed attention. Spraying foliage and fruit is objected to by some, while the copious evaporation of moisture in warm confinement is also objectionable as breeding blight, etc.

The very finest Grapes grown in California, for size, beauty and lusciousness are upon vines so trained as to allow the branches of fruit to hang quite near but not to touch the ground; and upon vines of sufficient age, to furnish an over-arching mass of foliage, completely sheltering the fruit from the direct rays of the sun. The spreading vines luxuriate under unobstructed sunshine, which gives to the vine a vigor, and to the fruit a perfection, no where surpassed. The soil is neither very dry nor really moist, and the slight evaporation from soil and foliage is all the moisture that the fruit needs or gets. No rains here in summer to wet fruit or leaves. The days are warm and dry, the nights cool and but slightly damp. The fruit is chilling if plucked and eaten in the morning, but gets quite warm toward evening. Even this alternation of temperature between day and night may be stimulating and beneficial in effect. Of course, the soil must be deeply penetrable by the roots, rich in needed earthy salts, and in no wise stagnant, and all other conditions conduce to the promotion of superior qualities. Too much moisture in soil, and too much in air by evaporation, as upon low-lying river alluviums, cause a sappy growth of vine and watery, acid fruits, while mildew prevails even upon vines high-trained to stakes. On the other extreme, on very dry soils, in hot, exposed situations the fruit is smaller, but rich, with growth of vine comparatively meagre.

From the above facts, one might plausibly infer that under glass the vines should be so trained as to afford an ample spread of leaves to fullest sun-

shine, with density sufficient to shade the Grapes from the sun's rays; that showering vines after the buds open is no advantage; that the moderate amount of water necessary may be supplied by evaporation; that the night need not be made quite warm, and that moisture is most naturally provided during hours of rest, viz., at night; that while nights be cool and moist, not wet, the days should be warm, sunny, dry and airy, when fresh air, warm and dry, can be admitted.

It is now twenty-seven years since I stood inside a grapery under glass. I cannot pretend to teach. Practical and experienced gardeners can view these facts and suggestions from their own standpoint, and make such application as their actual knowledge may dictate. The subject, at least, is interesting to such as have given it much attention.—S. HARRIS HERRING.

A PERVERSE PLANT.

I saw, years ago, in a catalogue, a glowing description of the merits of the *Crassula perfoliata* as a house plant, and which stated that it produced spikes of waxy, star-shaped, white flowers about Christmas-time, if memory serves me correctly. In process of time I became possessor of a plant of this species, and potting my treasure set it in the open air in a partially sheltered situation, after which I had leisure to indulge in visions of holiday flowers *ad libitum*. But in an evil hour a wind arose and shattered my bright prospects and the *Crassula* at the same time. I bound up the wounded plant, however, and had the satisfaction of seeing it readily repair damages, with the exception of the scar or disfigurement of the stem which remained to tell of the disaster. Of course, it was not strange after this mishap that it did not blossom at Christmas, and when still another Christmas arrived and it failed to perform according to programme, although viewed, perhaps, with suspicion, the offence was condoned on the ground of my neglect, mismanagement, or some excuse; but when it failed to produce any bloom the third winter, I don't know hardly what I did attribute the lapsus to. I still kept my plant, however, and it grew and "flourished like a green Bay tree." At last, in a lucky moment, I saw

an article in VICK'S MAGAZINE, I think, which said that the *Crassula* being a succulent, required a period of rest. Of course, I saw my mistake instantly. I had not given the plant the necessary rest, and I mentally decided to reduce the refractory specimen to "its lowest terms," in order to reap my reward the coming winter.

With this charitable design, in the spring or summer, I placed it in a window with a southern aspect, and proceeded to starve it, after the most approved manner, giving, of course, an occasional drink to prevent exhaustion. Many of the leaves shriveled, and the poor thing looked as if it was doing penance for its past misdeeds in the most rigorous way; but I was firm. No pity for its sufferings should tempt me to forego those spikes of waxen bloom next Christmas, and the discipline went on. At last, after a long period, I concluded to start it into growth, so I placed it in the window where it was to remain for the admiration of the beholder. I do not remember whether I repotted it at this time, or had done so the preceding spring,) and began to water it. A few, perhaps, of the oldest leaves dropped off, and the shriveled green ones began to expand, filling up marvelously quick into the most glossy and healthy-looking foliage imaginable. The ends of the branches looked green and thrifty and the whole plant put on the most flourishing appearance. Christmas drew near, but just here there appeared to be a hitch in proceedings, the waxy spikes did not appear to be forthcoming! Look closely as I would, not a symptom of a blossom could I discover, and although this experience took place over a year ago, I haven't seen any yet. I can't very well put the plant in a smaller pot for fear it would tip over, and as for poverty of soil it does seem as if by this time it must have pretty well exhausted that in which it has been growing so long, for I have never repotted it since my disappointment. It is about two feet from the top of the pot to the top of the plant, and the stalk at the base is five inches in circumference, and it weighs some less than a ton, I suppose, as I can lift it.

This interesting specimen continues to grow larger and larger, and looks so plump and comfortable and has such a

complacent and self-satisfied air that it is worth keeping as an example of cool and systematic impudence; nevertheless, if any one can suggest a way of bringing this refractory *Crassula* to a sense of its short comings and induce it to put forth a few of those long deferred and anxiously looked-for flowers, I shall be greatly obliged.—L.

THE PEPPER TREE.

On a recent visit to California my attention was frequently attracted to the Pepper Tree, *Schinus Molle*, belonging to the same natural family as the Sumacs,



FRUIT OF THE PEPPER TREE.

the Mango and the Cashew tree. It is a native of Peru, and is often called the Peruvian Mastic. Its stem is very branching, with a dark brown bark. The leaves are alternate and pinnate, with ten to fifteen pairs of leaflets, and a terminal odd

one much longer than the others. The leaflets are about an inch and a half long, and a quarter of an inch broad, tapering to a point and serrated at the edges. They are of a light green color, and emit an odor of pepper when bruised. The flowers are small, of a greenish white color, in loose panicles, and are suc-

shade tree, and is as freely planted as the Maple is with us; it is common about farm houses. The branches are fine, flexible and drooping, giving the tree a very graceful appearance, and having much the effect of a Weeping Willow. The branches often droop quite to the ground, so as to conceal com-

pletely the trunk. Near Santa Barbara, and at other places, the farmers plant close rows of these trees along the lines of the road, and frequently cut in the heads, making them very dense, so as to make a mass of foliage that screens entirely from view the fruit groves and orchards behind them. The largest trees have trunks from ten to fourteen inches in diameter. At the nurseries in Los Angeles the trees are raised in immense quantities from seed, and from the appearance of the grounds I should think that this and the Eucalyptus constituted the bulk of the stock.

An interesting fact connected with this tree is the movement of the petioles or leaf-stems when thrown into water. They start and jump as if alive, and at each movement emit a jet



AN OLD PEPPER TREE.

ceeded by coral-red fruits; these clusters of bright fruit are very ornamental, they have a strong odor of pepper, and are sometimes employed to adulterate the pepper of commerce. About San Francisco the trees are planted on the lawns, and the largest specimens I saw were only eight or ten feet high, but in southern California, at Santa Barbara, Los Angeles and further south they were from fifteen to thirty feet in height. In all that region the Pepper tree is the principal

of oil into the water. The explanation of this phenomenon is that water affecting the tissues causes the oil sacs to empty themselves, and the recoil from the discharge produces the sudden movement of the stems. This tree will only live in warm climates unattended with frosts, or nearly so, where it is evergreen. It is strange that it should be used in Southern California to the exclusion of so many other trees that are undoubtedly as well adapted to the situation.—C. D. C.

SCARLET-FLOWERING ACHANIA.

Achania Malvaviscus is a beautiful greenhouse plant belonging to the natural order *Malvaceæ*. It is a native of South America, Mexico and the West Indies, and was introduced into cultivation as early as 1780. It is a plant of vigorous, erect, symmetrical growth, bearing a striking resemblance to an *Abutilon* in its habit, and attaining a height of from ten to twelve feet, and flowering in profusion the greater portion of the year. It is really a beautiful plant, with bright green, heart-shaped leaves, and brilliant scarlet flowers, which are produced in profusion, and at the end of every branch these flowers are succeeded by white berries which soon change to a bright red; these berries alone render the plant an object of attraction, and well worth cultivating for, even did it not produce flowers in such profusion.

Another peculiarity of this plant consists in the leaves and stems often having attached to them white grains resembling sand; these grains being a waxy substance secreted by the epidermis, and are an indication of healthy, robust growth. Then they are particularly noticeable, and are considered by all as a great curiosity, while to the inexperienced cultivator they are rather a puzzling affair, for he mistakes them for some insect pests, and much time, trouble and anxiety are spent in vain efforts to remove them.

The *Achania* is a plant easily cultivated, requiring during the winter season a temperature of from 45° to 55°, and as much sun and light as one has at his command. Good drainage is also required. It prefers a light, rich compost, a mixture of two parts well-rotted sods and one part well-rotted manure will answer very well. Do not permit the plant to suffer for want of water, which should be freely given; give also a little liquid manure occasionally, and syringe the plant freely and frequently.

During the summer season the plants can be planted out in a rich, deep border, due care being taken as to watering. It should be planted out about the tenth of May, and taken up and potted about the middle of September in this climate. Propagation is effected by cuttings, and if the young plants are liberally treated and properly cared for, fine specimens

will soon be obtained. The best way to grow the plant is as a pyramid, as thus the fruit and flowers show to great advantage, and when grown as a window plant turn frequently so as to preserve a perfect shape. If syringed frequently it will be kept free from all insect pests.—CHARLES E. PARNELL, *Queens, N. Y.*

SOME LITTLE-KNOWN PLANTS.

An interesting plant is *Lasiandra macrantha floribunda*, in its habit of growth, unique but beautiful foliage, and profusion of bloom. It bears flowers of a very rich purple color, nearly all the year round. Mine is the only one I have seen, and I think the plant is not widely known. As I was about to remove the withered blossom I noticed close to the base of the calyx what seemed like a tiny bud; so I was very careful not to harm it. It grew very rapidly and flowered in a few weeks. The second blossom, which was borne on another stalk, had also a tiny bud at the base, and this afterwards bloomed; but in neither case was there a bud started. Not being acquainted with the character of the plant, I do not know whether this is always so, or whether in larger plants one bud after another succeeds the bloom.

Sonerila Hendersonii is a very attractive variety of this species from the variegation of its leaves, which are beautifully studded over with silvery white, tiger-like spots on a rich, dark olive-green ground. Color of flower rosy-lilac. Easily cultivated and a profuse winter-bloomer.

Abutilon Sellowianum marmoratum is the name not very euphonious of a new variety, the leaves of which are very large and ornamental; their color is a golden yellow, richly marbled with green.

Among the double white Oleanders, we know of none so fine as Lillian Henderson. The flowers are very rose-like in form, and deliciously fragrant.—MRS. M. D. WELLCOME, *Yarmouth, Maine.*

WHITE ROSE.

My darling gave me a Rose,
A white Rose, sweet and pure.
O, purer than Alpine snows
Is her heart who gave the Rose,
And no fairer flower grows;
She's mine forever more,
She gave me a pure, white Rose,
Her heart is mine, I'm sure.

—LILLA N. CUSHMAN.



PROPAGATING THE EXOCHORDA.

The beautiful, hardy shrub, the Pearl Bush, *Exochorda grandiflora*, of which an engraving was given in our last volume, is yet but little known in this country. It has always had the reputation of being difficult to propagate. Root-grafting was a method once resorted to, but it proved to be a slow process.

Several years since, an English gardener published his practice, as follows: "Introduce a good sized bush of it into a little warmth in spring, and as soon as the shoots are two inches long, take them off, cutting through between the new and the old wood. Insert the cuttings in the usual manner, placing them under a glass in moderate amount of warmth; or, let the shoots grow to their full length, and when they are just beginning to get firm, take them off and cut them up into lengths of one or two joints each, inserting them as just directed. The principal point is to keep them quite close and shaded; their foliage will be very tender, and, therefore, susceptible of injury."

We do not understand that the difficulty of striking cuttings of this plant has entirely disappeared by the above method, but that the results of all attempts at propagation are yet quite uncertain, and the plant continues a scarce one. To those, therefore, especially who are trying to solve this problem in practice, the following free translation from an article in the *Revue Horticole*, over the signature, MALET, may prove interesting:

Each year, at the flowering of this plant there is a unanimous declaration among those who see it that there is none prettier. In that I recognize they are perfectly right; I do not hesitate to join the admirers. But then, if I ask why it is so little planted I recognize the general be-

lief that it is difficult to propagate. It appears to me that this difficulty has been very much exaggerated. In my long career as a horticulturist I have learned that whatever may have been the difficulty of increasing a given species of plants, there has always been a means of surmounting this difficulty. Very well! The *Exochorda* is no exception; each year I raise a great number of them, and succeed perfectly. About the middle of August, or even sooner, I cut the extremities of the new shoots and reduce them to four or five inches in length, (ten to twelve centimetres.) Having prepared these cuttings and removed the leaves from the base merely, (it is necessary not only to leave the other leaves, but to carefully avoid bruising them,) I plant them closely together in light soil, composed of leaf-mold and sand; (*terre de bruyere*,) under a bell-glass in open air. Once planted and watered, I cover with the bell-glass, which I lift as seldom as possible, and that only to visit them and to weed them, if that should be necessary. Toward the end of September, I satisfy myself of the condition of the cuttings, and, as soon as they are rooted, I immediately take them up and pot them separately in little pots in new soil, and place them in cold-frames, shading them so that the sun shall not flag them. I say "immediately take them up," because if one delays this operation, and attends to it only when the leaves are about to fall, I have known the roots to decay and the plants die. I have even noticed that it is better to operate sooner than later, and lift the cuttings when they have yet only a large callous; in that case the roots will develop in the frame. I repeat, it is important that the plants should make a growth after potting and before the com-

plete arrest of their vegetation, that is to say, before the leaves fall. Thus treated the plants finish their growth in the frame, where they are left until the following spring, when they are placed in the open ground.

CARNIVOROUS PLANTS.

The *Gardeners' Chronicle*, in the following extract, notices some new experiments made to ascertain the effects upon plants of the animal matter they assimilate:

"Although physiologists have universally accepted the facts originally proposed by DARWIN as correct, yet there has been a disposition in some quarters, if not to question the fact, at least to doubt its utility. Mr. FRANCIS DARWIN undertook some experiments to satisfy the latter point, and now we have to record the results of some experiments made by M. BUSGEN. This gentleman commenced his experiments with seedling *Droseras*, and ascertained that the digestion of nitrogenous matter begins with the appearance of the first leaf. The experiments were continued for two years, with the results that those plants 'fed' with nitrogenous diet in the shape of aphides and small insects were the more vigorous. Fourteen plants so treated produced seventeen flower-stalks and ninety seed-pods, while sixteen plants not so treated produced only nine flower stalks and twenty seed-pods." Analyses showed that the total weight of dried matter of the unfed plants was only about one-third of that of the fed plants—a very remarkable difference.

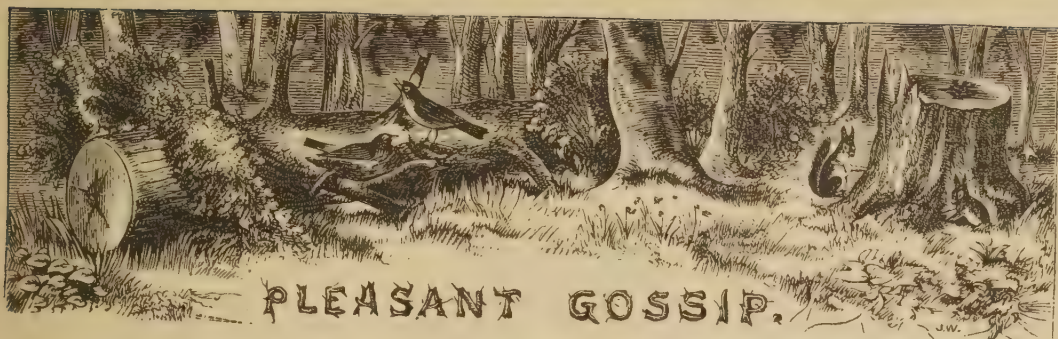
PASSIFLORA CONSTANCE ELLIOT.

A new seedling variety of *Passiflora cærulea* has been raised in England. The following is a description by a correspondent of the *Gardeners' Chronicle*: "First, it is as hardy as the type, and has the same beautiful foliage. The flowers, however, are ivory-white, almost without a trace of that bluish tint which gave the species its name—the styles alone show evidences of the purplish hue characteristic of the species. Structurally the flowers present no difference whatever from the ordinary form, even in the disposition of the threads of the corona, but in color, as we have said, the difference

is considerable, and the agreeable fragrance is, speaking from memory, much more marked in the new variety. The sepals are greenish on the outer surface, white within, the petals white, the outer threads of the corona ivory-white, faintly tinged with yellow toward the tips, the remaining coronal threads have the same tint, and are quite destitute of the purplish bars and tips which characterize the species. Whether the fruit differs from the ordinary long, ovoid, orange-colored berry, we do not know. In any case it is a very beautiful variety, whose elegance and singularity of form, and delicacy of tint, will commend itself to all plant-lovers." It has been named *Constance Elliott*.

MARIPOSA LILIES.

I think that if it can be said of anything that "even SOLOMON in all his glory was not arrayed like one of these," it might be said of a *Calochortus*. It can vie with a Lily, or an Anemone, or a *Sternbergia*, (the three candidates, I believe, for the honor of being referred to in the 6th chapter of St. MATTHEW's gospel,) and in some respects win the palm from them all. The markings on the petals of *Calochortus venustus* are simply gorgeous, and *Calochortus luteus*, var. *oculatus*, is even more striking; the clear yellow of the flower gives such a beautiful background for the picture which is painted upon it. *Calochorti* gave me some trouble before I could properly manage them, but they have grown easily enough when once the real secret has been found out. Their manner of operation exactly reverses that of a *Crocus*. They dive into the ground instead of throwing themselves on the surface, and they must be planted in the autumn if they are to do well; they cannot be kept out of the ground, like *Milla biflora*, till the spring. But what most astonishes me about them is their comparative hardiness and the way in which they can bear many degrees of frost. I have several times seen *Calochorti* spearing up through two or three inches of snow in the month of January, without feeling it at all. One never would have expected this from the denizens of a California plain, and where they are flooded with sunshine for so many months in the year.—HENRY EWBANK, in *The Garden*.



PLEASANT GOSSIP.

THE HAUNTS OF CHILDHOOD.

I know where the pretty blue Violets hide,
And Anemone's blossoms in beauty expand;
In the leaf-shadowed thicket,
The flower-wreathed thicket,
Where Brake and sweet Ferns by the breezes are
fanned.

I know where the Thorn boughs bend over the
stream,
And the Crowfoot clings close to the cool, mossy
rocks;
'Tis the shadiest dingle,
Where odors commingle,
To sweeten the fountain that nature unlocks.

I know where the wild Grape, Black-haw is found,
I know where the Shag-barks and Almonds abound;
The summer Choke-cherries,
The red Checkerberries;
In Childhood I measured every foot of the ground.

I'm older, and years set their seal on my brow,
And cares keep me close where my loved ones abide;
But the deep tangled wildwood,
And haunts of my childhood,
In the noontime of life I look back to with pride.

—M. J. S.

JASMINE—ROSES—IVY—INSECTS.

I have a Grand Duke Jasmine which I value very highly; but it does not seem the least bit inclined to grow. Can you, or any of the readers of the MAGAZINE, give me an idea of the treatment it requires? It is my first experience with Jasmine, and I am rather "green."

Oh dear, what a time I am having with my Roses; they are very stubborn, especially the young ones. I have an old bush that does the Rose family credit. I think after one gets them fairly started they are easily managed. The young bushes I sprinkle every other day with warm water, sometimes oftener, but it seems impossible to keep them free from insects and the leaves from turning yellow and dropping off. I pick the buds off as soon as they put in an appearance. Do I treat them right?

Sometime ago we had a beautiful English Ivy. The leaves dried and dropped off; we washed it and put new earth around it, but did it no good, and we were compelled to throw it away, and since we have not been able to get one to grow to any size at all. Can you tell me the reason, and give me some idea as to treatment?

One more question, please. What will destroy the little green slugs that infest Mignonette? Mine has been troubled with it for the last two summers, and this summer I am going to try prevention.

This is the first year I have taken your MAGAZINE,

and I hardly know how I could get along without it.
—R. F. W., *Beaver River Corner, N. S.*

The Jasmine should have a soil consisting of fibrous loam, and a fourth part of leaf-mold, and a little sand. The plant requires heat, but should have plenty of light and a fair amount of air. While growing freely give plenty of water, and do not allow the soil to go dry at any time, but during rest it should be only moderately moist. Syringe the plant frequently during summer.

If the leaves of the Rose plants turn yellow and drop off, there is cause to apprehend stagnant water in the soil, or insects. If the former, supply drainage, or if the latter, destroy them as have been directed in previous numbers of the MAGAZINE, especially the June number of this year.

The English Ivy is a plant of the easiest culture in the house. It is not very particular about soil, almost any mixture of sand and loam being suitable. Water moderately, frequently sponge and syringe the leaves, give a fair light and ventilation, and it will be difficult to fail with it. But if it should be neglected and allowed to become covered with dust and dirt, and insects to take possession of it, it will speedily go from bad to worse.

Insect powder—Pyrethrum—dusted on the Mignonette plants or applied in water will destroy the green worm that sometimes infests it.

VIOLETS FROM SEED.

Will you please tell me the way to raise Violets from seed? I have tried three times and each time have failed; I would like to know how to make them grow.—OLD SUBSCRIBER, *Washington Heights.*

Violets are seldom raised from seed, but from offsets of the plants. To raise them from seed it is necessary to sow the seed as soon as ripe, otherwise it will not germinate.

SOME HARDY PLANTS.

I send a dried flower of a yellow Rose; will you please tell me something of its origin? It is the hardest Rose that I am acquainted with, blooms about the middle of May, and is covered with flowers. I would like to know the name of it.

I also send a specimen of a wild flower that blooms about the first of May. Will you please tell me the name of it?

Would the English Walnut be hardy here?

I saw a shrub in a lady's yard, that somewhat resembles the Black Locust; it was covered with pink flowers. The lady said it was a Pink Locust. What is the name of it, and is it hardy?—J. L., *Pleasantville, Ind.*

The Rose is Harrison's Yellow, a variety supposed to be a hybrid between an Austrian and a Scotch Rose. It is quite hardy and a very free bloomer. The flowers are semi-double, golden yellow, and the leaves usually have nine leaflets.

The wild flower mentioned is the Smooth Lungwort, *Mertensia Virginica*, a



MERTENSIA VIRGINICA.

very handsome, hardy, herbaceous plant. It is worthy of very general cultivation, and is adapted to all the northern country.

It is probable that the English Walnut will succeed well in the region of southern Indiana.

The shrub inquired about is, doubtless, the Rose or Moss Locust, *Robinia hispida*. It is hardy and handsome.

LICE ON PLANTS.

Will you please inform me how to get rid of lice on house plants? They are little green lice, and they almost destroy some of my plants. They are on my Lantana, Monthly Roses, Carnations and winter Pansies. I have picked them off and killed them, but in a few days they will be on again. I hope some one can tell me how to get rid of them.

This is the first year that I have taken the MAGAZINE, and think it is very interesting. I would not want to do without it.—MRS. M. E. P., *Nappanee, Ind.*

The most common way of destroying

the lice, or green-fly, as they are called, on house plants is by slowly burning tobacco in a close room with the plants. Waste tobacco or tobacco stems are used, dampened, so as to produce as much smoke as possible for a long time. The room should be filled with the smoke so as to almost render objects invisible. When only a few house plants are to be fumigated, they can be set in a close box and smoked. Another way of ridding the plants of the lice is to make a weak infusion of tobacco, and dip the plants into the liquid. A few plants can be cleaned by syringing them with strong soap suds, and after a few hours washing them with clean water. Repeat either of these operations as often as the insects appear.

ROSE BUDS NOT OPENING.

Please tell me if there is any remedy against the persistent obstinacy of the *Souvenir de Comte de Cavour* keeping shut up, as it does, instead of opening out and showing what a grand flower it is? Some say if you pinch the buds and breathe in them they will open. But you might as well pinch and breathe on cannon balls as on the buds of my plant. Two years ago they bloomed beautifully in this section; last summer and this they are like marbles.—DAME DURDEN, *New Bedford, Mass.*

We would suggest that a considerable portion of the wood be thinned out this fall, and in the spring the remaining shoots be shortened back to a foot in length; also, that a good dressing of old manure be given this fall and left on the ground until spring, and then be lightly dug in. Give the plant the necessary winter protection.

ONLY A CHEERY LETTER.

My heart was sad and weary,
And deaf to all things but its sighs,
And the light of the stars and the sunshine
Was dimmed by the tears in my eyes,
When to me came a close-written letter,
(Folded in it a Violet sweet,)
Brimming over with kindest praises,
With merriest fancies replete.
It began with the warmest of greetings,
It ended with tenderest phrase,
And reading, my spirit grew lighter
Than it had been for many long days.

Only a friend's cheery letter,
Sent straight from a friend's cheery heart,
But freighted with powers so potent
They bade all my shadows depart.
The powers of love and of gladness—
What greater on earth could there be?
And with them, as smiling as ever,
Once more they brought hope back to me.

—MARGARET EYTINGE.

QUERIES FROM NEW BRUNSWICK.

I have been trying to make a collection of Liliums for several years past, but with rather indifferent success. I planted no less than twenty-four kinds, but some of them have never bloomed, and the auratum, longiflorum, citrinum, robusta and some other varieties have shown a tendency to become smaller each year, till they have ceased to bloom, and in some cases have entirely disappeared. Does the Lily bulb naturally become smaller and weaker when planted out of doors?

Is there any difference between the Von Sion and the Incomparable Narcissus? I have planted the two kinds and they seem about alike.

Should the Pottsii Pæony produce a double or a single flower? I have one, very beautiful in color, but the bloom is single.

Would I be likely to succeed in growing Crown Imperial from seed, and would the seedlings probably be different from the parent? I have one, a Single Red, which is producing seed this year. I know of but few plants more satisfactory than the Crown Imperial.

I procured, some time since, a Purple Fringe, *Rhus typhina*, which has proved quite hardy here in central New Brunswick, and is considered a great curiosity. Is the White Fringe a plant of the same family, and do you think it would be hardy here?

Is there a pure white Lilac?

I have planted the Dog's Tooth Violet, but it did not bloom. Should it generally do so?

I hope I have not inflicted too many inquiries upon you. I have been for some years making a collection of plants, mostly hardy perennials, and I have now some hundreds of them. Among those I have found not hardy here are *Wistaria*, *Coreopsis lanceolata*, *Althea* and the *Tritoma*. I kept the latter plant out winter and summer for five years, till it was a joy to behold, and then it winter-killed. The *Anemone Japonica*, of which I made inquiry of you, last winter, I have tried again, and this time with success, as it has withstood the winter and is growing finely.—W. S. B., *New Brunswick*.

The different species of Lily behave variously under cultivation, some succeeding in one locality, some in another, and what results will attend them in any given locality can be known only by trial. The skill of the cultivator is tested by the results he achieves, for by proper management some will meet with success and others with failure, under the same natural conditions, the different results being due to difference of cultivation.

The yellow Daffodil, Von Sion, and the double variety of *Narcissus incomparabilis* are similar, and scarcely to be distinguished, except that the latter have some lighter colored outside petals.

Pæonia Pottsii is a double flower, dark purplish crimson; a very fine variety.

Crown Imperial may be raised from the seed, and the seedlings would be apt to be similar to the parent plant.

The plant mentioned above as Purple Fringe is probably *Rhus Cotinus*. The White Fringe is *Chionanthus Virginicus*.

It bears a temperature of twenty degrees below zero, to our knowledge

The Large-flowered White Lilac, a variety of the common Lilac, *Syringa vulgaris*, is the best white sort; this is distinct from the common White Lilac, another variety of the same species.

The Dog's Tooth Violet, *Erythronium*, will probably bloom another season.

OLEA—PASSIFLORA—HOYA.

Please tell us in next number all about *Olea fragrans*, its habits, requirements, blooming season, &c.

Will some one inform me why *Passiflora, Arc-en-ciel*, will not bloom, when for two summers it makes a luxuriant growth of vine and leaves on the arch of a flower stand? It was cut back for the winter. Is *Passiflora alata* hardy enough to stand our winters out on the lawn with a covering of leaves?

How old does *Hoya* require to be to bloom?—T. R. THORNTON, M. D., *Lee's Summit, Mo.*

Olea fragrans is a favorite greenhouse and window plant. It can be potted in good fibrous loam with a little old manure. A moderate temperature of 55° to 65° is best for it; water as the plant uses the moisture. In summer it does well when plunged in the pot in a shady border.

Passiflora alata will not bear the winter in Missouri, even with protection.

A plant of *Hoya* will sometimes bloom in six months from the cutting.

TREATMENT OF WAX PLANT.

Having been a constant reader of your MAGAZINE since its first publication, I often see inquiries about the treatment of the *Hoya*, Wax Plant, to make it bloom. Having been very successful with mine, I give my mode of treatment. I have one nearly four years old, started from a slip in a small pot. After it had rooted and commenced throwing out shoots, I repotted into a six-inch pot, putting in equal parts of sand, leaf-mold and rich dirt, and have never repotted it since, or disturbed it in any way. I wet the soil thoroughly three times a week in summer, twice in winter, using soft water, and once in two weeks putting in ammonia. It stands on northwest side of my bay window and never gets the hot sun; it covers the whole top of a wire plant stand. One year ago it bloomed in May, having on nineteen large clusters, one coming out the second time. This year, buds commenced swelling in March, and in April it was in full bloom, having nineteen large clusters, which continued nearly two months, and before the last

one was withered the buds commenced swelling again, and is now, July 5th, in full bloom again, filling the room with its delicious perfume, and is the admiration of all my friends. Perhaps all your readers do not know that the blossoms come from the same buds year after year, therefore, if they wish a profusion of flowers, they must not take off the blooms. There are many small buds on mine besides those now in bloom, and the plant is growing all the time. I think it is uncommon for the plants to bloom twice the same year, or, at least so near together.—S. A. B., *Teed's Grove, Iowa.*

TURNIP FLEA-BEETLE.

A correspondent, Mrs. S. P. HOUSTON, at Boston Station, Ky., sends us the following description of a new method of preventing the attacks of the little black beetle, *Haltica*, which does so much mischief to all the cultivated cruciferous plants. "I noticed that some in speaking of raising Turnips, say that the little black flea eats up the plants. I will tell you how I prevent that. I soak the seed in fish oil about ten hours before sowing, then mix them with meal or dry ashes so as to separate them. I have tried this plan for many years and the fly never troubles my plants; it is also good for Cabbage, Radishes, Candytuft, or any kind of plants that the little black flea infests."

A late bulletin of the New York Experiment Station, details trials that have there been made with various substances to prevent the work of this mischievous little insect, and no results of much value have been obtained, except by the well-known method of dusting the plants while wet, with air-slaked lime.

If soaking the seed in fish oil will protect the plants, there is no reason why this method should not be very generally employed. We do not understand why the oil on the seeds protects the plants, but it is a simple matter for any body to test, and we hope to hear of trials of it from all parts.

FATE.

A sunbeam kissed a river-ripple,—“Nay,
Naught shall dis sever thee and me!”
In night's wide darkness passed the beam away,
The ripple mingled with the sea.

—JOHN VANCE CHENEY, in *The Century*.

VARIOUS INQUIRIES.

H. L. C., Chicago, Ill., asks how plants can be protected against ants, caterpillars and grasshoppers. Ants can be trapped and killed by placing meat bones in their way, and when they have collected on them, dropping them in hot water. Pieces of sponge can be used for the same purpose by first sprinkling fine sugar into the cavities. A vial of sweet oil sunk nearly to the rim in the ground where the ants run will attract them and cause their death. Caterpillars can be hand-picked, on a small scale. Grasshoppers are difficult to deal with; covering plants with musquito netting is the best protection.

F. M. W., Worcester, Mass., inquires for the probable cause of lack of fruit on Strawberry bed of Charles Downing, the plants of which are in prime condition, soil rich and bloom abundant, the crop not being a third of what was fairly estimated. It is not at all unlikely that the blossoms were injured by frosts which occurred when the plants were in full bloom. The dry weather that prevailed all along the Atlantic States during May and June would also greatly shorten the crop. There is no cause for discouragement in this case; as a rule, the Strawberry is one of the surest of fruits.

S. A. B., of Iowa, writes to know if there is “any remedy for the small, streaked worms that bore holes in the stems of the Dahlias, and eat their way up through them, causing them to wither and die;” and adds, “they have destroyed many of mine when nearly ready to bloom.” We have no knowledge of the insect here referred to; but if any of our readers are possessed of information relating to it, we trust they will make it known in these pages.

A. L., Gaines, N. Y., asks if *Caladiums* ever blossom. They do, having inflorescence similar to the *Calla*.

GRAFTING GRAPE VINES.

Dr. CONGAR, of Pasadena, California, has invented and is patenting a “grafting apparatus” by which a thousand or more vines can be grafted in a day, and “failure to take reduced to a minimum.”

STRAWBERRIES, NEW AND OLD.

The Parry and the Banquet Strawberries are said to be promising candidates for popular favor. Many others in all parts of the country are coming forward. The Banquet is a seedling of Miner's Prolific, supposed to be fertilized by the wild Strawberry, *Fragaria Virginiana*. The points claimed for it are good size and high quality. The Parry is a seedling raised by WM. PARRY, of New Jersey, from Jersey Queen. It is described as follows: Plant prolific, a strong grower, with large, vigorous, clean foliage. Berries uniformly large in size, obtuse conic, bright, glossy scarlet, firm and of best quality, but little core, ripening all over at once; blossoms hermaphrodite or perfect; season medium.

We notice by the various reports that Wilson's Albany has, this season, as usual, held the lead as a profitable market variety, and apparently the Crescent follows it next. Cumberland Triumph is winning new friends as it becomes known, proving to be very productive, handsome, and excellent for home use and for a near market.

THE MARLBORO RASPBERRY.

We have received from A. J. CAYWOOD, originator of the Marlboro Raspberry, specimens of that variety, being branches containing the fruit. These indicate a strong-growing, vigorous habit, and great productiveness, the shoots being very strong, with a heavy burden of fruit. The fruit is large and firm and of good quality; the color is a bright scarlet. A small basket of the fruit packed in the box containing the branches came in a very fair condition, a small number only of the berries being crushed; this is a good test of its shipping character, the distance it traveled being about three hundred miles. Berries packed in crates in the usual manner, we think, would stand carriage even better, as the basket was not made quite tight in the box, and on its arrival it had worked so that it had considerable movement. The fruit on the branches arrived in a perfect state.

A note sent with the fruit, says: "We send, to-day, by express, a box of the Marlboro Raspberry, grown from green plants set one year ago. We have been picking from them for market since June 23d, and will continue two weeks yet.

We had ripe fruit on the 20th of June." The Marlboro is evidently destined to make its way in the world.

ROSE BUGS.

Will you kindly tell me what to do with Rose bugs on Grape vines? We are greatly troubled with them. —M. B. W., *Baldwins, N. Y.*

The application of Paris green or London purple in the usual modes, dry or in water, will destroy the insects; but most people will hesitate to use these poisonous substances on Grape vines, and will prefer to adopt hand-picking, and shaking the insects upon sheets.

LITERATURE.

Good Cheer for July has just made its appearance, and, as usual, it is filled with the liveliest and most entertaining and instructive matter. It cannot fail to interest every member of the family from youngest to oldest. With VICK'S MAGAZINE and *Good Cheer* in the family, parents will find they have most efficient aids in governing, educating and training their children. And we send both of these journals for one dollar and a quarter for a year. We hope to send *Good Cheer* to all of our subscribers next year, and shall expect them all to make the merits of both known to their neighbors, and to double their circulation.

CORRECTION.

In some remarks in our last number in regard to scale insects on vines, an omission of two words considerably changed the character of the statement intended to be made. In the first column, fourteenth line, page 212, the words, "vines cultivated," should be followed by the words, "under glass," which were in the original manuscript. The treatment described for ridding vines of scale insect applied to vines in graperies or "under glass." It was previously stated that, "the Grape vine bark-louse has never proved very injurious to our open air vines, and it is seldom that any notice is taken of it."

FORESTRY.—Forest fires keep the people alive to the subject of forest planting, and there are many indications that tree-planting in permanent plantations will soon become a feature of rural industry in various parts of the country.

A GARDEN JOURNAL.

August 1 and 2. Sowed Spinach for fall use. Grafting Epiphyllum on Pereskia stock. Pulling suckers from the growing Corn, so as to give strength to that which is left and to promote earliness.

3. Sowed Radish and Cress in a spent hot-bed, for fall use.

4. Hoeing Lima Beans and Okra.

6. Cleaning out and hoeing Strawberry beds. Very cool for this time of the year.

7. Hoeing and cleaning walks.

8. Planting Endive for fall and winter use.

9. Taking off laterals from out door Grape vines.

10, 11 and 13. Cleaning lawn and walks. Destroyed the Gooseberry and Currant worm by dusting insect powder on the bushes.

14. Saving seed from Picotees. Used the first Egg Plant to-day.

15. Budding Oranges.

16. Cleaning the Asparagus beds. Shaking out and repotting plants of Double White Primula, intended for winter blooming.

17. Tying up Lima Beans.

18. Looking over and tying up Azaleas.

20. Picked the first ripe Fig, being one of those that remained on the trees all winter. Planting Cos Lettuce for fall use.

21. Caring for the Orange trees by washing dust and scale insects from them with soap and water, and taking out some of the old soil and top-dressing with good rotted, loamy turf and cow manure, and placing the plants where they are fully exposed to the sun.

22. Sowing Spinach seed for a crop for fall use, and for next spring. The ground was very dry and the seed was sown in drills and trodden in with the feet before covering.

23. Watering the Celery. Weeding the Melon patch.

24. Cleaning the flower beds, and nipping back foliage plants in the beds, to make them grow thick.

25. Used the first Lima Beans. Sowed some Picotee seed in the border for flowering plants next year.

27 and 28. Putting in cuttings of Geraniums. Washing pots and getting ready for potting early in September.

29 and 30. Repotting Begonias and Ferns for winter.

31. Sowing Early Egg Lettuce in cold-frame for wintering over. Taking off the

runners from the Violet plants intended for winter blooming.

THE JAMES VICK STRAWBERRY.

Up to the present time we have carefully refrained from saying a word in praise of the James Vick Strawberry, more than to state what others have said whom we thought to be reliable. We are now pleased to say that in our own trials of it on soils of different characters it has proved to be all that has been claimed for it. The plant is a model of health and vigor. It is a staminate variety, and is extremely productive, and the berries are of quite uniform size, a few are large and but few small, the most of them of a good medium size. The fruit in quality is superior; it is not equal to the best, though it ranks higher than most popular varieties. It has a pleasant acid with a decided flavor that reminds one of the old Black Prince and the Hooker, but without reaching their very high standard. The berry is firm, a splendid keeper, and must prove an excellent shipping variety. We can recommend it confidently either for home use or market.

SAMUEL MILLER, of Bluffton, Mo., who first cultivated this variety, makes public his experience this season with a large number of varieties, and of the James Vick, he remarks: "If any one wants a Strawberry to excel this in a crop of handsome berries, fine, medium to large, and excellent quality, with shipping qualities not excelled, they must hunt it up. Foliage of the darkest hue, and plants of the most vigorous character. On my plants that have had a fair chance, the berries are piled upon each other. While some berries are ripe, there are still blossoms, so that when the others are all gone we expect fruit on it." The time of ripening is immediately after the Wilson.

WILD PLANTS.

E. P., of Covington, Ga., can obtain plants of Trailing Arbutus of EDWARD GILLET, Southwick, Mass.

From the same party, E. I., of Roscoe, Iowa, may procure Cypripediums.

We cannot say who can supply Vanilla Grass, that E. P. inquires for. This grass, which is Hierochloa borealis, is not uncommon.

GARDEN NOTES.

Northern gardeners have to fight the two extremes of weather, zero frosts in midwinter and scorching heats before May is over. The protection against heat is to set plants deep. I used to wonder why Pansies from the florists would sicken, turn yellow and drop off at the joints soon after transplanting. The present spring has taught a lesson. Scores of fine Pansies set out in the garden borders in full bloom were set so deep that the lower branches lay on the ground, and the upright ones were gently bent down as for layering, and covered with soil to the first leaf-joint. Of course, they did not look so smart or make as brave a show as others set out as they came from the cold-frame, six inches high. But the buried ones have not flagged for frost or sun, and now, June 15th, are deep green and thriving with a second crop of fine blossoms. The few set upright are yellow, hollow-stemmed and will hardly last till cooler weather in their south border. Heliotropes, Carnations, Verbenas are apt to come from the forcing bed rather leggy and sprawling. The only thing to do for them is to lay the stems down, spreading them like a star, if the plant is branching, and cover with plenty of mellow, moist soil to the lower leaves. It is beautiful to see how well they grow through hot weather, and how strong they look with ordinary care. If set with long, bare stems out of ground no watering will make them look well through the heats. A good rule for spring planting, and summer most of all, for all plants is the same that old gardeners give for setting young Cabbages, earth up to the lowest leaves.

"A bit of glass," old country gardeners style any sort of greenhouse under ducal proportions. But a bit of glass, even a single sash, or a modest shed of a forcing house, is the greatest comfort to ambitious growers, and I hope to live to see a tiny greenhouse as much a part of every home as a clothes press or a porch. Inside its walls one may control an ideal climate, whose tempered calm is just as much benefit to human beings as to the plants they cherish. Out of doors one has the tropics, the tides of air from the equator, the electric currents from the pole, the effects of the earthquake in Java, the spots in the sun to contend

with in raising one's Currants or one's Pansies; but behind that pane of glass May frost and drying wind, June chill and sunstroke, do not make over much. Seeds come up and seedlings grow apace, Tuberoses are budding before Phlox Drummondii is ready to set out, and a Rose is blooming in some corner the year round.

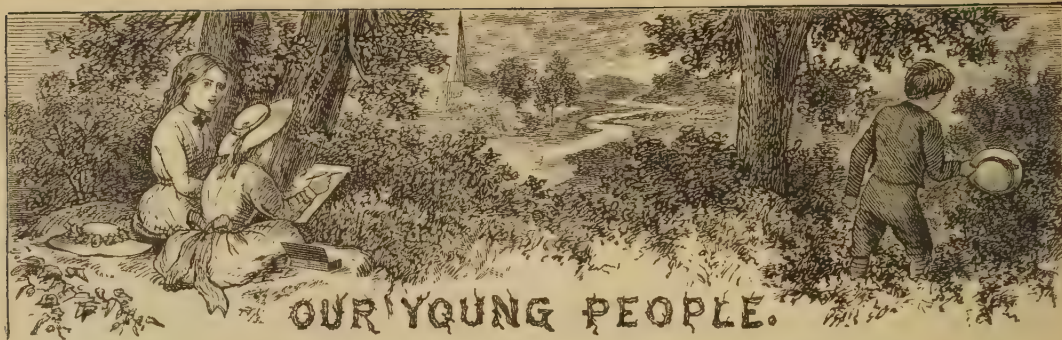
There is plenty to be learned in simple gardening that it is a wonder everybody does not well know already. For instance, that soils and seasons can be made warmer and earlier by inexpensive care. Dressing clay loam plentifully with sand and sifted ashes will make it warmer and hasten crops, beside lessening the danger from late frosts. This is because sand absorbs more warmth from the sun and air, and holds it longer than clay or wet soil. I can see it in the flower beds, where sand has been liberally added, and plants rejoice to grow, while if laid away in the native stiff loam they stick as if growing out of putty. Coal ashes are ever so much better put on the gardens than strewn to make the most disagreeable and dingy kind of sidewalk, ruinous to leather and the hems of dresses. The Cabbage and Cauliflower beds, in particular, need all the coal ashes you can save, scrape and beg of your neighbors.

The pests of the garden ought to be turned to profit. Dandelions should be dug up and the roots saved for medicine, being more sovereign for biliousness than calomel, ordinarily. Sour-grass and Wood Sorrel are delightful additions to salads; Purslane and Pigweed are good and safe for greens. But every weed of them is gold, if only flung at once on the compost heap with a covering of moist earth.

Weeds should not be left to wither in walks, but carried off in wheelbarrows as fast as pulled and buried while the natural moisture is present, which hastens their decay. Green stuff buried in damp soil is fit for dressing the garden again in a month.—P.

PINEAPPLE BRANDY.

A planter of New Caledonia has distilled a fine quality of brandy from Pineapples, and it is thought that a large amount of this delicious fruit will eventually be similarly converted.



NORA'S OUTBURST.

I.

Nora Lawson was in the garden one morning, picking Peas. Before she returned to the kitchen her father had seated himself in the adjoining room, near the open door between the two, and was quietly fanning himself with his hat. Nora came in sweltering and rosy with heat and perspiration, and setting down her basket of Peas, commenced thinking audibly.

"Yes, it was all very well," she said, "for Tom Moore to have written the 'Song of the Shirt,' with its prickly refrain of 'Stitch, stitch, stitch,' and I'm glad he wrote it; but who ever cared to put into song the homely duties that kept alive the very poet who wrote the lines? The same duties that still keep alive the creatures who wear the shirts? Nobody. Reason why: Poetry can't be made out of cook and sweep and dust, and dust and sweep and cook. If there's any twang about such a lingo, it must come from the jangle of the frying pan and skillet. I just wish——."

In utter amazement at hearing such a strain from his eighteen years old daughter, Mr. Lawson stepped to the door to see who was her listener; astonished beyond measure that she would talk in that way before any one, and interrupted her with:

"Why, Nora, to whom are you talking?"

With crimson face averted, she answered:

"To no one."

"Are you in the habit of talking to yourself?"

"No, sir; that was only an outburst."

"An outburst implies an overflow from a source hitherto pent up. Is this your usual tone of feeling on household duties?"

"Yes, sir."

"How long since?"

"Since coming home from school."

"And your mother has been gone only three weeks, and your faithful Swedish girl but one. I had supposed that the prospect of your mother's restored health would reconcile you to assuming her duties."

"So it does; I am glad to assume her duties whether she were home or absent but not those of Christine."

"Well, daughter, as she is to be gone only another week, I hope you will bear with us 'creatures who wear shirts' as patiently as possible. I might have instructed your brothers to remain longer in their fishing camp, had I known their presence here would have made your duties unpleasantly onerous."

"Oh, father, don't! You must know that I like to have them here, if they do add to my work. And, besides, when the routine of cooking three meals a day and keeping the house in order is to be gone through with, it matters little whether there be two or four in family."

"Well, Nora, the boys should help you enough to make your work light until Christine comes."

"The boys do not know now to help, and would not care to if they did."

"We'll see. Who picked these Peas?"

"I did, of course."

"Where are the young gentlemen?"

"In the barn, mending their fishing tackle. They are invited by some parties at the Glen House to go out with them in a boat, to-night, and fish by moonlight. And, by the way, they brought me word that Marion Gray is coming, this morning, to spend the day; and I suppose that knowledge made me more desperate than usual. There she comes, now, on her pony."

While Mr. Lawson goes to assist her, it may be explained that the young lady was three years Nora's senior, was a graduate of Vassar College, had become acquainted with the Lawson family during her stay at the Glen House the summer previous, and that among the recent arrivals was a discarded suitor of hers, who still hoped to win by persistently seeking her society.

Meantime, Nora slipped off her work-sleeves and apron, and hurried to the front door where Marian saluted her with a "Good morning," at the same time exclaiming:

"Why are you standing here looking so serene, Nora? Your father says you have no 'help,' and I expected to find you in the kitchen, where I shall be myself in just one minute."

So saying, she drew off her riding gloves and doffed her English jacket and long skirt, worn on special occasions in lieu of a riding habit, and took her lead to the kitchen, despite Nora's remonstrances. Mr. Lawson followed with an amused smile, and as he passed along to stable the pony, heard Marian exclaim:

"Oh, what lovely Peas! how I shall enjoy shelling them." But in a minute more she was at his side, saying:

"Mr. Lawson, Nora says that her 'girl' is to be absent a week yet. Will you be so kind as to allow me to remain here until she returns? I will be, on my best behavior, and more grateful than you can ever know for the privilege."

Of course, he assented very readily, though surprised at the earnestness of the request. Marian then explained that she allowed an invalid girl at the Glen House to use her pony each day, and therefore would like it returned; and the messenger, she said might come to her for a note to her mother, who would send such articles as she might need during her stay.

This all being arranged, and the pony gone, Marian hurried to the kitchen and announced her self-invitation to remain a week, and her resolve to make herself useful.

"Do you know," she added, "I am perfectly delighted that Christine's absence gives me so grand an excuse for imposing myself upon you."

"I am glad," replied Nora, that you

can care to stay with us under such unpromising circumstances, but I really must forbid you the kitchen. You may rummage into every nook and cranny of the old house for entertainment, and tease the boys to your heart's content, talk politics or church matters with father, and when tired of such diversion, you will find on the book shelves an old volume of the Koran intact, which you can look over; or, by climbing to the top of the attic stairs, you'll find a stock of musty old books, grown precious with age; but you cannot trespass upon my domain."

"Thanks," said Marian, "you are kind. But you forgot that I am a Vassar girl, and know how to be practical." And as the shelled Peas rattled away in the tin pail, she went on, "If I can't stay on my own terms it will only be good exercise to walk the two miles, to-night, that lie between us and the Glen House."

So Nora could say no more, and Marian went on shelling the Peas and chatting about the little colonies lying so snugly in compact rows inside their secure shells, each one hung by a stem of its own to the walls inside.

"O, how interesting and curious it is," she exclaimed, until Nora laughed outright at her enthusiasm over any thing so simple as garden Peas; and then Marian retorted that she thought nothing that grows is so perfectly cunning as a pod full of Peas.

Next she fell to scraping the new Potatoes, commenting the while on their extensive arrangements for future propagation and their curious method of growing.

"Just to think," she said, "how they will multiply from bits of the whole tuber, and grow a family of perfect ones, a regular nest full of them, as though knowing they were to supply a world full of consumers the year round. O, Nora, how much more interesting the table vegetables are before they are cooked than afterward—"

"I beg leave to differ."

"And here comes the Sweet Corn, already husked. Do let me take the silk off the shining ears, Mr. Lawson; the very feel of them is delightful."

And so she went on from one thing to another. There were pieces of tableware to be studied minutely, as she wiped the dishes after dinner; and Nora's at-

tention was called to different points of interest, either to the beauty and grace of some design on a dish or to the shapely form of the dish itself, or, perhaps, to the quality of the glaze which had cracked in its hot-water baths, while that on older pieces was still perfect, and then the manufacturer's brand on the under side would be sought, until Nora decided that Marian could find something of interest in everything she touched or saw.

That night the boys came home in the small hours, leaving their fish in water where Nora could find them for breakfast. When they appeared at a late hour, next morning, Marian served their coffee, and was shortly asked if any fish had been saved for them.

"Yes, indeed," she answered, and brought in the wooden pail of water and fish, saying, "Here they are; help yourselves." Then added, "Did you think I was going to let Nora dress these fish for breakfast? No, indeed. When sportsmen bring home game they should prepare it for cooking themselves, unless there be a man-of-all-work on hand. So, if you want these splendid fellows for dinner, you know the terms." Then, taking the pail back, she exclaimed to Nora:

"Was there ever anything so symmetrical as fishes?"

Nora was secretly so delighted with the bit of domestic discipline her brothers were receiving that she told Marian she should reign supreme during the remainder of her stay, and that herself would obey orders; to which Marian laughingly assented, without demur, saying:

"Well, then, if I am to be autocrat, tomorrow morning we will arrange home affairs so that, after dinner, you and I can climb once more up the banks of Stoney Creek till we come to the cascade, where we'll make a halt. I remembered through the snows of last winter some flowers I saw there last summer, in this month. I sent, this morning, for my 'flower-press' and blotting pads, also my herbarium, and I'll see if I cannot perpetuate those flowers, so that by the aid of memory I can paint them at home."

"And I'll take my botany," said Nora, "so we can name any new ones to us that we may chance to find.—AUNT MARJORIE.

THE ROMANCE OF A ROSE.

I am quite well aware that most persons living in this prosaic and matter-of-fact age of the world think that romances exist only in the pages of a book. The poet, who is to them only a visionary dreamer, fashions them out of the airy fabric of his fancies. He makes of them a thread on which he strings pearls of fantastic thought. The story-teller weaves a web of romance about the men and women he creates, because he dislikes to deal with real, every-day life. He ignores the actual, and makes an ideal world for his characters to live in. "Men and women don't fall in love, now-a-days," these unromantic persons will tell you: "They are too sensible for that. If they make up their minds to marry they look at the matter in a practical way. They mean business, and act accordingly. Romance! Pshaw! There's no such thing in the nineteenth century."

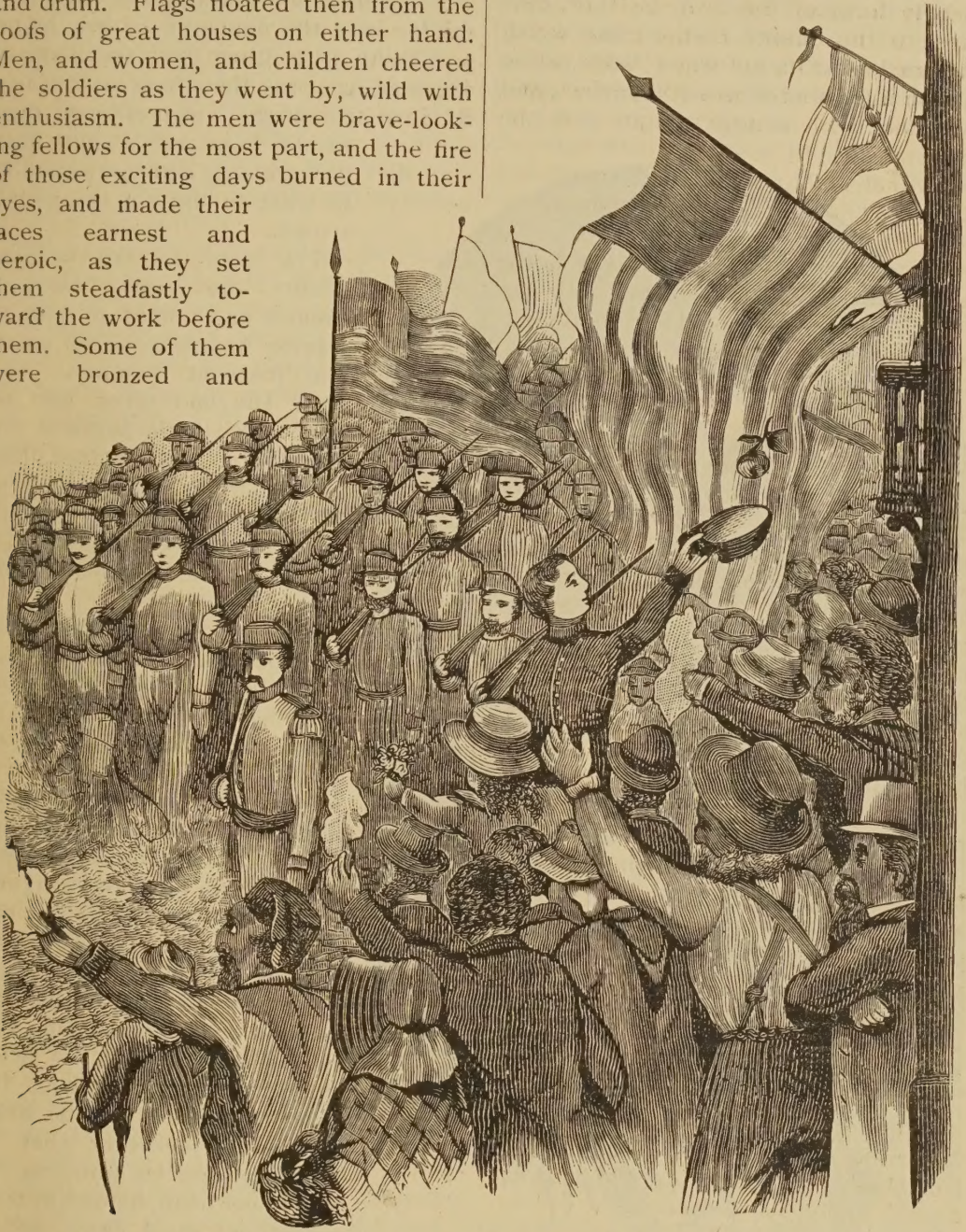
But I do not agree with them. The world is full of romances, and always will be. They must exist from the very nature of the human heart. Little romances weave themselves into your life and mine, which no one but ourselves dream of. This golden thread runs through the lives of all men and women. I care not where you go, or what life you take up to prove to me that my theory is wrong. Look into its past, and under the cobwebs of the years you will find something hidden away that will show you that you are in error. The poorest creature in the world is not too poor to have a little romance in his life about something or some one. And once in a while we see these little romances being lived out about us, and we smile softly over them, as we do over a pleasant story, and are glad to know that the world has not grown so old that the heart no longer feels the thrill of passion it used to "once upon a time." Love is not a myth.

In rather a curious way I chanced upon a pretty little story of love, with a golden thread of romance in it. I am going to tell it to you, because it proves the truth of what I have been saying. Many readers may think it a fiction, and say, it "isn't at all likely that these things ever happened," but I assure you that it is true.

The romance began in the early days of the late war.

A regiment of blue-coated soldiers went marching down the streets of a great city to the stirring music of bugle and drum. Flags floated then from the roofs of great houses on either hand. Men, and women, and children cheered the soldiers as they went by, wild with enthusiasm. The men were brave-looking fellows for the most part, and the fire of those exciting days burned in their eyes, and made their faces earnest and heroic, as they set them steadfastly toward the work before them. Some of them were bronzed and

made their homes. The windows and balconies were thronged with women who smiled down upon the boys in blue,



OFF TO THE WAR.

bearded, and you could have told by the hard, rough hand that carried the gun that its owner was familiar with toil. Some were young men with soft, white hands, and faces fair as a woman's, and you would have felt sure that all hardships of life had been to them only things dreamed of.

The regiment passed out of the great thoroughfares of trade and into a fashionable avenue, where wealthy men had

many of them with tears dimming the scene before them, as they thought of what might be. Fair hands waved them good-bye, and fair lips breathed God-speed, as the men went marching on.

At one window a girl stood with a thoughtful look in her eyes. She was thinking, perhaps, how many of these men would never come back to the homes they loved so much. Under the feverish excitement of the time and the

scene, she saw the sure results of war, and it saddened her almost to tears.

A soldier, who was but little more than a boy in years, came down the street close to the window where she stood. He was a fair-faced fellow, with yellow hair and eyes as blue as summer skies. His face had a strange beauty in it that

each other in some other world, but met in this for the first time on this summer morning.

She smiled down at him softly, her face tender with the thoughts at her heart, and breaking a Rose from the plant in the window at her side, dropped it down to him. He caught it as it fell, and then with a bow and a smile that had greeting and farewell in it, he went on and was lost in the crowd.

The face at the window haunts the young soldier's dreams and comes to him in waking moments, like a sweet and pleasant memory. The Rose she had given him he kept between the pages of the little Bible his mother had given him in the morning of his leaving home. He would keep the flower to help him remember the sweetest face he had ever seen.

It puzzled Archie Dare that he should think so much about a face he had seen but once, and that for only a brief moment. It was quite likely he would never see it again. It was as if two vessels had met at sea and gone their separate ways. Their tracks might never cross each other again. But the face of the girl at the window seemed, in some strange and inexplicable way, to become part of his life. It seemed to belong to him, and he got to calling it "his face," in his thoughts of her. He used to wonder nights, when he was on picket, or when he woke up and lay watching the stars over head, if possibly they might not meet again, and if they did, how, and when, and under what circumstances it



PEACE.

caught and held her attention. It was a face womanly in its fairness, but with the strength of a man's nature shining through it.

He looked up suddenly, as if he felt the magnetism of her glance, and their eyes met, and they felt a mutual recognition of kinship of soul in that first glance. It was as if they had known

would happen.

Years went by, and the war was ended, and Archie Dare came home unhurt. He had been a brave soldier, he had never shirked his duty, and it was not to be wondered at then that the boy who had gone into the field with undecorated sleeves came back wearing a colonel's stars. The fair face had grown brown.

and bearded, and the boy was a boy no longer. He haunted the streets of the city where he had seen the face he could never forget. He sought it and could not find it. It had mingled in the crowd in the boulevards of life and vanished. "I would give the world, if I had it to give, to find that face again," he said often and often, to himself, as he went hither and thither, always watching and hoping to find the woman he sought; but he sought in vain.

And so another year went by, and hope in his heart was like a fire that had died almost out, and is covered by its ashes.

One night, he went into a concert-room, drawn thither by the music that came ringing out upon the evening air, sweet and entrancing as the music heard in dreams. At least, he thought then that it was the music that drew him into the glittering throng where fair faces gleamed like flowers from box and gallery, and diamonds flashed like imprisoned fire-flies on soft white hands, and the air was sweet with the smell of dying flowers. But he believed, afterward, that it was the subtle influence of soul on soul that drew him in through the open doors; it was that, or fate.

The orchestra was playing a wild sweet symphony when he went in. The weird strains took possession of his soul and wrapped him in a trance of ecstasy. The crowd of faces about him faded away and for the time he was alone with the wonderful music. Then it ended in a long, low chord that trembled into silence without breaking the spell that was on him.

Suddenly a face shone down upon him as a star trembles into sight through a haze of sunset vapors. A sweet, pale face, with the record of a sorrow in the brown eyes. His heart gave a great throb, and his breath came quick and fast, for it was the face he had seen so long ago, the face he had dreamed about so often, the one face in the world to him.

Then she sang; he never knew what. He only knew that it was something sorrowfully sweet that hushed the house to silence, and brought a shower of flowers to her feet when it was finished. She bowed her thanks, and then it was that her eyes met the eyes of Archie Dare, and her memory went back over the dead years, and she saw the boy's face instead

of the face of the man who was looking at her with such strange fascination in his eyes. Then she bowed again, as one does an act unconsciously, and vanished from the scene. He wondered if he had lost her again. He gathered from the hum of conversation that sprang up after her song, that she was the only daughter of a man who had been wealthy, but had lost everything by some sudden turn of ill-luck, and the girl who had been singing had looked the matter bravely in the face, and was earning a living for her father and herself.

There is but little more to tell. One day, Colonel Dare met the woman whose Rose he had carried with him so long. It was not like the meeting of strangers.

"I have always kept the Rose you gave me," he said to her. "See." And he showed her the faded flower, out of whose heart the fragrance had not wholly died. "And I have kept the memory of your face in my heart. Let me keep you in my life; may I?"

She did not say him nay. Her heart had gone out to him with the flower she had given him, and it had been his through all the years when their paths in life ran apart.

This is the romance of two lives. There is nothing wonderful about it, but it is a pretty little romance for all that, and I like to think there are others like it that we know nothing of.—EBEN E. REXFORD.

THE GLADNESS OF NATURE.

Is this a time to be cloudy and sad,
When our mother Nature laughs around;
When even the deep blue heavens look glad,
And gladness breathes from the blossoming ground?

There are notes of joy from the hang-bird and wren,
And the gossip of swallows all through the sky,
The ground-squirrel gayly chirps by his den,
And the wilding bee hums merrily by.

The clouds are at play in the azure space,
And their shadows play on the bright green vale,
And here they stretch to the frolic chase,
And there they roll on the easy gale.

There's a dance of leaves in that aspen bower,
There's a titter of winds in that beechen tree,
There's a smile on the fruit, and a smile on the flower,
And a laugh from the brook that runs to the sea.

And look at the broad-faced sun, how he smiles
On the dewy earth that smiles in his ray,
On the leaping waters and gay young isles;
Ay, look, and he'll smile thy gloom away.

—BRYANT.



ROCHESTER.—*Rochester, a Story Historical*, by JENNY MARSH PARKER, is the title of a handsome volume published by SCRANTON, WETMORE & Co., of this city. It is an account from authentic records and from the statements of living witnesses of the earliest settlement of Rochester and its development to the present time. At first thought it might seem improbable that a volume of four hundred pages on this subject could find attentive readers, but who ever peers into this book will find himself deeply interested. The tale of a city of a hundred thousand inhabitants springing from the forest in little more than half a century, has in it something of fairy romance; but when in these pages are traced the origin of persons and ideas that have acquired world-wide fame, we are able to perceive with some clearness how great has been the influence that this energetic community has exerted in the world. Rochester people, with their characteristic enterprise and push, have gone into all parts of this country, and they, and many others, will delight in finding in this volume the trustworthy accounts of everything of interest pertaining to the growth of Rochester. The free distribution of bibles by some of the early residents of this city, was the commencement of a movement resulting in the founding of the American Bible Society. Here SAM PATCH made his last jump over the Genesee Falls. Two of our citizens were claimed to have been abductors of MORGAN, and "it is said that upon Rochester Masons was thrown the responsibility of disposing of him at last." Rochester was a focus of Millerism and of Abolitionism. FREDERICK DOUGLASS was long a resident here, editing and publishing his anti-slavery paper. SUSAN B. ANTHONY, the great champion of woman's rights, is one of our citizens. The mysterious "knockings," or "rappings," first heard here by the Fox girls, have since been heard throughout the world. We have not space to notice more. The appearance of the volume is very fine, and is beautifully illustrated with views of places, buildings, persons, &c. The portraits include those of NATHANIEL ROCHESTER, HENRY O'REILLY, DR. CHESTER DEWEY, MYRON HOLLY, SUSAN B. ANTHONY, KATE FOX, D. W. POWERS, JAMES VICK and Dr. MARTIN B. ANDERSON. The writer, endowed with a lively mind, a pleasing style, a familiar acquaintance with the scenes and many of the persons of whom she writes, and having access to all sources of information upon her subject, has infused into the story a vividness and reality in the highest degree fascinating. The price of the book is \$3.50.

RUSSIAN APPLES.—MR. CHARLES GIBB, of Abbotsford, Canada, has supplied us with his notes on the Russian Apples imported by the United States Department of Agriculture in 1870. These notes, which constitute a paper included in the ninth report of the Montreal Horticultural Society, are published separately in pamphlet form, with a map of that portion of Russia from which the varieties of Apples were procured. The notes, with the accompanying illustrations, make a valuable contribution to the literature of Russian Apples, in which many in this country are interested. The Department at Washington has distributed these varieties very widely, having sent out, in one season, over a hundred thou-

sand packets of scions. MR. GIBB says: "I would urge that a systematic effort be made to reap the harvest of information which will be obtainable next autumn. Let all, throughout the country, who have tested these fruits send notes to the horticultural societies of their respective States, and thus tend to bring facts to a focus on this important question. My information in the following list is based upon visits, in August last, to the orchards of Mr. SPAULDING, (formerly that of Mr. MOULTON,) near Minneapolis; A. W. SIAS, Rochester, Minn; J. M. UNDERWOOD, Lake City, Minn.; A. G. TUTTLE, Baraboo, Wis.; State Agricultural College, Ames, Iowa; ELLWANGER & BARRY, Rochester, N. Y. Also, Mr. A. WEBSTER, of South Northfield, Vt., and Dr. HOSKINS, of Newport, Vt., brought to the Montreal Horticultural Society exhibition samples of their Russian fruits, and gave me every opportunity of getting information from them. Mr. WM. SAUNDERS, of the Department of Agriculture, also very kindly loaned me brief notes and tracings he had taken." The pamphlet can probably be supplied by the author.

COTTAGES.—WM. T. COMSTOCK, 6 Astor Place, New York, has published a volume, entitled, *Cottages, or Hints on Economical Building*, containing twenty-four plates of medium and low-cost houses, contributed by different New York architects, together with descriptive letter-press, giving practical suggestions for cottage building. Compiled and edited by A. W. BRUNNER, architect. To which is added a chapter on the water supply, drainage, sewerage, heating and ventilation, and other sanitary questions relating to country houses, by WM. PAUL GERHARD, C. E. The price is one dollar, for which sum the publisher will send it by mail, free of postage, to any part of the world. All the subjects in this volume are treated ably, and in accordance with the most modern ideas in regard to all the questions involved. The designs are elaborated with skill and taste, and the volume cannot fail to prove an acceptable assistant to all who may have occasion to consult it practically with the view of building country, suburban, or watering-place cottages.

MICROSCOPISTS IN SESSION.—The seventh annual session of the American Society of Microscopists will be held in this city on the 19th day of August. The society will be entertained by the Rochester Academy of Science, and a combined exhibition of both societies will be held in one of our largest halls. This meeting promises to be one of great interest, and the public exhibition will probably be one of the most brilliant ever witnessed in this country. Very complete arrangements have been made to ensure the most agreeable and interesting sessions, and ample facilities will be afforded to all who may present papers for fully illustrating them. To all microscopists, and all interested in natural history subjects it will be worth a long trip to be present here at that time.

ONE THOUSAND POPULAR QUOTATIONS, lately published by J. S. OGILVIE AND COMPANY, 31 Rose St., New York, is a very creditable and useful compilation. In addition to the quotations it also contains nearly three hundred selections for writing in autograph albums. The price in paper covers is 25 cents, and 50 cents in cloth, for which sums it will be sent anywhere by mail.

MANNERS AND SOCIAL USUAGES.—Such is the title of a handsome little volume written by Mrs. JOHN SHERWOOD, author of *A Transplanted Rose*, and published by HARPER BROTHERS, New York. It should find a place in every well-ordered home.